MU gideon lens

Micron Technology, Inc. (MU) - Gideon-Lens Equity Research

Date: 2026-04-29. Analyst: Codex ER2. Price: $504.29 from the live FMP quote pulled during synthesis. Market cap: about $568.7 billion from the same quote. Fiscal year end: 52/53-week year ending on the Thursday closest to August 31.

VERDICT BLOCK

Verdict: PASS

Scorecard:

Gate	Result	Notes
Management	PASS	Strong AI/HBM execution, aligned incentives, capex risk monitored
Moat	FAIL	HBM qualification is real, but memory economics remain cyclical and commodity-linked.
P/E <= 15 on confident EPS at TTM + 5 calendar years	PASS / YELLOW	Base clears by +10.3%, but Check 9 fails/flags recency
Compounder Score	Audited 38 / 100	38 / 100; diagnostic Reject because valuation scores zero and audited business quality is capped by uncalculated ROIIC, cyclicality, and missing product-dollar evidence.
Business Quality Score	Audited 38 / 80	38 / 80; AI-memory runway is real, but through-cycle ROIC, FCF conversion, capex reflexivity, and YELLOW moat evidence do not clear the quality-compounder bar.
20% Return UW Score	Audited 0 / 20	0 / 20; at $943.875, base and bull 15x FY+5 values are below the quote, so a 20% case requires major terminal multiple expansion.

One-line thesis (or reason to pass): Micron is a real AI memory winner, but earnings still rest on cycle and scarcity economics; the moat now fails the 20-year compounder bar despite valuation upside.

Kill / trigger criteria:

- BUY trigger: price below $445, which creates roughly a 20% discount to the base-case P/E 15 value of $556 and gives room for memory-cycle error.
- PASS triggers: CMBU revenue below $7.0B in either of the next two quarters, CMBU margin below 55%, or loss of sold-out/allocation language.
- Upgrade to BUY conditions: two more quarters show durable CMBU/CDBU revenue at high margins, HBM backlog remains allocation-constrained into calendar 2027, and the stock still offers at least a mid-teens P/E 15 cushion.

Position sizing if bought: 0% today. If the BUY trigger is met with confirming operating evidence, cap at 1.5% of the equity book because memory-cycle reflexivity and capex risk remain material.

ER2 stricter-gate recalibration (2026-05-28): Moat moved from YELLOW to FAIL because HBM qualification and scale are real, but memory economics remain cyclical/commodity-driven and current scarcity is not enough for a 2046 moat. This top scorecard supersedes any softer gate phrasing elsewhere in the appended materials; the underlying evidence was reused, but the gate standard is stricter.

Stage 0 - Time Anchor

Today is 2026-04-29. Micron uses a 52/53-week fiscal year ending on the Thursday closest to August 31; FY2025 ended August 28, 2025. The most recently reported quarter is fiscal Q2 2026, ended February 26, 2026, reported by Micron on March 18, 2026. The TTM anchor is Q3 FY2025, Q4 FY2025, Q1 FY2026, and Q2 FY2026, which means TTM ending February 26, 2026. The forward horizon is exactly five calendar years after that TTM date: February 26, 2031. Every FY+5

reference in this report means that TTM-to-TTM+5y horizon, not FY2025 plus five years and not a six-year fiscal stretch.

Stage 1 - Disqualifier Sweep

ROIC is yellow because Micron is exiting a severe memory downcycle and the current ROIC profile is not yet a 20-year proof of persistent 15%+ economics. FCF conversion is yellow: cash generation has improved sharply, but the company is entering a large AI-era capex cycle. Net debt/EBITDA is green/yellow because the balance sheet is resilient, though capex can absorb cash quickly in a weaker pricing environment. End-markets are green/yellow because AI/HBM, data-center SSD, automotive, and edge AI are growing, while PC, mobile, NAND, and broad memory remain cyclical. Governance is green with no disqualifying related-party or dilution flag. AI disruption exposure is green/yellow because AI is a demand driver for memory, but customers can still capture value through scale and dual-sourcing. Pricing power is yellow because HBM and advanced data-center memory have real scarcity today, while DRAM/NAND history remains commodity-like.

Management

Management earns a PASS. The management appendix credits Sanjay Mehrotra and team for executing through the memory downturn and repositioning the portfolio toward HBM, data-center SSDs, and AI-linked demand. The strongest evidence is not the language alone; it is the segment economics in the data package and B appendices, where CMBU and CDBU have become the core swing factors in the model. Incentives are reasonably aligned with HBM3E+, data-center SSD, and relative total shareholder return objectives, so management is being paid against the operating milestones that matter for the thesis. The appendix still flags two monitoring issues: the CEO/chair role is combined, and FY2026-FY2027 capex scale raises the risk that supply comes online into weaker pricing. Insider selling is material enough to watch, though partly under 10b5-1 plans and not a gate failure. Overall, management appears capable of earning a premium cycle outcome, but the management gate does not remove the memory-cycle risk.

Moat

The original moat appendix was YELLOW, and the 2046 test was also YELLOW; under the stricter May 2026 ER2 rubric, the main moat gate is recalibrated to FAIL because memory economics remain cyclical and commodity-linked. Micron has real advantages: manufacturing scale, process know-how, HBM and advanced packaging execution, customer qualification friction, and the ability to supply strategic memory at large volumes. Those advantages matter more in AI infrastructure than they did in older commodity memory cycles because bandwidth, power, and reliability increasingly constrain accelerator systems. The problem is that this is still a capital-intensive hardware market with concentrated customers and aggressive competitors. A plausible 2046 Micron exists as a strategic memory and storage supplier for AI data centers, vehicles, robotics, industrial automation, edge compute, and selected client devices. A plausible bear-case 2046 Micron also exists: memory remains useful but economics revert as customers dual-source, competitors add capacity, and government-supported supply weakens pricing. That is a moat failure under the stricter hard-gate rubric, even though the AI/HBM execution evidence remains real.

Stage 5 Synthesis

The synthesis produces an arithmetically coherent base case. At the February 26, 2031 horizon, base-case revenue is $114.012B, operating income is $49.086B, net income is $42.487B, and EPS is $37.07. The current price of $504.29 requires FY+5 EPS of $33.62 to meet a 15x P/E, so the base case clears by $3.45 per share, or +10.3%. The bear case fails badly at $18.19 of EPS. The bull case reaches $57.30 of EPS, but the framework does not allow the bull case to rescue a weak base case. The base case clears, but thinly.

Case	FY+5 Revenue	FY+5 OI	FY+5 NI	FY+5 EPS	P/E 15 Value	vs. $504.29
Bear	$77.543B	$24.219B	$20.853B	$18.19	$272.89	-45.9%
Base	$114.012B	$49.086B	$42.487B	$37.07	$556.05	+10.3%
Bull	$150.354B	$75.747B	$65.692B	$57.30	$859.55	+70.5%

The risk is the path. The synthesis reports 10 of 11 tie-out checks passing, with Check 9 failed/flagged on recency. That is not a clerical issue. The base forecast assumes that a meaningful part of the Q2 FY2026 step-up persists into the five-year endpoint. CMBU contributes the largest part of the incremental revenue and profit, with base-case horizon revenue of $53.782B and operating income of $29.036B. CDBU adds another $23.320B of base-case horizon revenue and $8.17B of operating income. MCBU and AEBU add diversification, but MCBU is also a margin normalization risk because its current TTM profitability is far above older cycle levels. In short: the valuation clears if AI memory scarcity becomes a semi-durable

industry structure; it breaks if this is a peak cycle wearing an AI label.

Red Team

Red team supports WATCH, not BUY. Its strongest argument is that CMBU HBM/cloud-memory scarcity may be a capital-cycle peak rather than a durable 2031 margin base. The most likely optimistic Stage 5 number is the 43.1% consolidated FY+5 operating margin, because margin risk is correlated across CMBU, CDBU, and MCBU. Moving only CMBU from base to bear removes roughly $8.27 of EPS, which would push base EPS well below the $33.62 required for the P/E 15 gate at today's price. The hard exit signal is specific: in the next two quarters, CMBU revenue below $7.0B in either quarter, margin below 55%, and loss of sold-out/allocation language. If those occur together, this report should move to PASS unless the share price has fallen enough to rebuild a large valuation cushion.

Kill / Trigger Criteria

- BUY trigger: price below $445, or an equivalent setup where base EPS of $37.07 offers at least a 20% cushion to the P/E 15 entry value.
- Upgrade trigger: two more quarters confirm CMBU revenue near or above the Q2 FY2026 level with margins above 55% and continued allocation/sold-out commentary.
- PASS trigger: CMBU revenue below $7.0B in either of the next two quarters, plus margin below 55%, plus management no longer describing HBM/cloud memory as allocation constrained.
- PASS trigger: FY2027 capex rises more than $10B year over year while gross margin falls below 50% for two consecutive quarters.
- Re-underwrite trigger: Micron discloses HBM or data-center SSD product-dollar history that materially differs from the model's starting allocations.

Analyst Flags

The QF/QFR gates cleared, and DR corrected the data package before Wave 2. Still, the report has important flags. First, Micron's current segment taxonomy has limited history; FY2023-FY2025 are the comparable years for current segments, and older CNBU-style history was not spliced. Second, HBM, data-center SSD, PC/client, mobile, automotive, and industrial product dollars are not fully disclosed, so several product-level forecasts are analyst allocations inside verified segment totals. Third, the synthesis failed/flagged the recency anchor check because the base case depends on the latest Q2 FY2026 run-rate being partly durable. Fourth, the moat is yellow, not pass, because memory remains cyclically reflexive even when AI demand is real. The final verdict is therefore WATCH: close enough to monitor aggressively, not clean enough to buy under Gideon discipline at $504.29.

Appendix A - Company Primer

Micron Technology, Inc. (MU) - Appendix A: Company Primer

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Stage 0 time anchor

- Today: 2026-04-29.
- Company fiscal year convention: Micron uses a 52/53-week fiscal year ending on the Thursday closest to August 31; FY2025 ended August 28, 2025.
- Most recently reported quarter: fiscal Q2 2026, quarter ended February 26, 2026, reported by Micron on March 18, 2026.
- TTM anchor: Q3 FY2025 (ended May 29, 2025) + Q4 FY2025 (ended August 28, 2025) + Q1 FY2026 (ended November 27, 2025) + Q2 FY2026 (ended February 26, 2026) -> TTM ending February 26, 2026.
- Forward horizon: TTM + 5 calendar years = February 26, 2031. Compounding span is exactly five calendar years.

Source basis and limitations

This primer is reader-facing orientation, not the audited quantitative source for later appendices. All financial figures used below come from `quant_foundation.md`, which reports `RECONCILIATION: 8/8 checks PASSED` and ties Micron's latest TTM to official SEC and IR sources. The local `data_package.md` was still a placeholder at the time this primer was written, so qualitative context is drawn from live source pulls saved under `raw/A-*`: FMP quote/profile/statements and transcript endpoints, Micron's March 18, 2026 fiscal Q2 release, Micron's FY2025 10-K, and Micron's FY2026 Q2 10-Q. Because the data package was unavailable, this appendix avoids making itself the source of record for historical numbers; downstream modeling should continue to use the quant foundation and any later verified data package.

1. Business overview

Micron is a memory and storage manufacturer. Its core products are DRAM, NAND, and a small amount of NOR. DRAM is volatile working memory: it holds data while a system is powered on and gives processors fast access to the information they need. NAND is non-volatile storage: it keeps data after power is removed and is used inside solid-state drives, managed NAND packages, mobile devices, industrial systems, and removable or embedded storage. NOR is also non-volatile, but it is a much smaller product line used mostly for reliable code storage in embedded applications.

The company's economic role is straightforward but technically demanding. Compute systems need processors, networking, memory, and storage. Processors perform the calculations, but memory and storage determine how much data can be kept close to the processor, how quickly it can be retrieved, how much power the system burns per task, and how much useful work a server, PC, phone, car, or industrial controller can perform. Micron designs, manufactures, packages, and sells these memory and storage products. The buyer is usually an original equipment manufacturer, cloud infrastructure operator, enterprise server or storage customer, smartphone maker, PC OEM, automotive supplier or automaker, industrial equipment maker, or distributor. For consumer and enthusiast markets, Micron also sells Crucial-branded memory and SSDs through retail, channel, and web-direct routes.

Micron is not a fabless semiconductor company. It owns major front-end wafer fabrication assets and back-end assembly/test assets, and it also uses subcontractors for selected manufacturing steps. The business therefore combines technology development, manufacturing scale, yield management, supply allocation, customer qualification, and channel execution. A customer does not simply buy "a chip" from Micron in the abstract. The customer qualifies a specific memory or storage product into a platform, such as an AI accelerator, cloud server, enterprise storage system, flagship smartphone, PC, vehicle electronics architecture, or industrial control module. Qualification can be long because memory must meet performance, power, thermal, endurance, quality, and availability requirements. Once qualified, Micron competes for share based on technology node, density, bandwidth, power efficiency, reliability, price, and supply certainty.

How the customer buys depends on the product and the buyer. Large cloud and OEM accounts are primarily served by Micron's direct sales force and technical teams. Distributors, independent representatives, retailers, and channel partners handle broader commercial coverage and Crucial-branded products. Micron's FY2025 10-K says customers have historically

resisted long-term fixed-price purchase contracts because memory pricing is volatile. That point matters: memory is a commodity-like industry with differentiated technology, not a subscription software model. However, the current AI-driven shortage is changing the contracting conversation. In the fiscal Q2 2026 call, management discussed strategic customer agreements, or SCAs, that include multiyear commitments and are designed to improve visibility and stability. The exact contract mechanics are confidential, but the direction is important: AI customers increasingly need supply assurance, and Micron wants enough commitment to justify capacity, HBM packaging, and R&D investments.

At the product level, the portfolio can be understood in two layers. The first layer is technology: DRAM, NAND, and NOR. DRAM was the dominant technology in the latest TTM, with $45.64 billion of the $58.12 billion TTM revenue base, while NAND contributed $12.15 billion and Other, primarily NOR, contributed $337 million. The second layer is market-facing packaging: HBM stacks for AI accelerators, DDR and LPDDR modules for servers and edge devices, GDDR for graphics-oriented workloads, managed NAND for mobile and embedded uses, SSDs for data center/client/consumer storage, and multi-chip packages that combine memory types in compact form factors.

The key primer point is that Micron's business is simultaneously more cyclical and more strategic than a typical component supplier. It remains exposed to DRAM and NAND average selling prices, industry bit supply, inventory, and utilization. But AI has made memory a gating resource for increasingly valuable compute systems. The stock debate is therefore not whether Micron sells useful products; it does. The debate is whether the AI demand step-up and tighter supply discipline can structurally improve returns enough to offset the industry's history of severe cycles.

2. Revenue architecture

Micron reorganized its reportable segments in Q4 FY2025 into four market-aligned business units: Cloud Memory Business Unit (CMBU), Core Data Center Business Unit (CDBU), Mobile and Client Business Unit (MCBU), and Automotive and Embedded Business Unit (AEBU). The FY2025 10-K restated prior-period segment amounts into this new structure. For FY2025, total revenue was $37.38 billion. Segment revenue was: CMBU $13.52 billion, or 36.2% of total; CDBU $7.23 billion, or 19.3%; MCBU $11.86 billion, or 31.7%; AEBU $4.75 billion, or 12.7%; and All Other $13 million. On a TTM basis ending February 26, 2026, the mix had shifted sharply upward with the AI memory cycle: CMBU was $20.96 billion, CDBU $11.17 billion, MCBU $18.98 billion, AEBU $6.99 billion, and total revenue $58.12 billion.

CMBU serves the largest hyperscale cloud customers and includes HBM for all data center customers. In plain English, this is the business that sells the memory used closest to AI training and inference compute. HBM is stacked DRAM connected with through-silicon vias and placed very close to accelerators so the processor can access data at high bandwidth and lower energy per bit moved. CMBU also includes DDR, LPDDR, and GDDR where those products are sold into large cloud data center applications. This is the segment most tied to AI accelerator roadmaps, cloud capex, and customer supply assurance discussions. In FY2025 it generated the most revenue and the highest reported operating income among the segments.

CDBU serves mid-tier cloud, enterprise, and OEM data center customers for memory, and all data center customers for storage. This segment is not "consumer storage"; it is mostly data center DRAM outside the largest hyperscale CMBU accounts plus data center SSDs and NAND components. Its products solve a different part of the data center problem: servers need DRAM capacity and bandwidth, while storage tiers need SSDs that offer high performance, high density, better power efficiency, and lower physical footprint than hard disk alternatives. Micron's Q2 FY2026 commentary emphasized data center SSD traction, G9 NAND-based PCIe Gen6 SSDs, high-capacity SSD adoption, and tight NAND supply. CDBU is therefore a way to participate in AI and cloud growth without being only an HBM story.

MCBU serves mobile phones, client PCs, consumer SSDs, and Crucial-branded products. This is the business most exposed to smartphone units, PC replacement cycles, on-device AI memory content, and consumer/channel sell-through. The segment includes LPDDR for phones and mobile computing, managed NAND and multi-chip packages, PC DRAM, client SSDs, and Crucial products. In the old memory cycle, this was a more traditional consumer electronics exposure. In the current cycle, management argues that on-device AI could lift DRAM and storage content per phone or PC even if unit growth is subdued. The important distinction is unit demand versus content demand: PC and smartphone shipments can be flat or down, while memory dollars per device rise if configurations step up.

AEBU serves automotive, industrial, and consumer embedded markets. It sells memory and storage into cars, factory equipment, robotics, networking and communications equipment, consumer embedded systems, and other long-life applications. This business is smaller than cloud and mobile/client, but it often has different qualification cycles and reliability requirements. Automotive customers care about product longevity, quality, temperature tolerance, and functional reliability because memory can sit inside safety-critical electronics, advanced driver assistance, infotainment, and smart cabin systems. Industrial and embedded customers similarly value long availability and support. The segment's revenue reached $4.75 billion

in FY2025 and $6.99 billion on the latest TTM construction, benefiting from the broader price recovery and from growing memory needs in vehicles and connected industrial systems.

Geography is material, but shipment geography and customer headquarters should not be confused. Micron says roughly one-third of FY2025 revenue came from customers headquartered outside the United States, while about 80% of FY2025 revenue was shipped to customer locations outside the United States. That means operational and trade exposure is global even when the end customer relationship may be U.S.-anchored. The company also operates major facilities across the United States, Taiwan, Singapore, Japan, Malaysia, China, and India. For an investor, the geography point is not just revenue diversification. It affects export controls, tariffs, China restrictions, substrate and material availability, currency exposure, government incentives, and construction execution.

3. Unit economics

Micron's unit economics begin with wafer starts, yields, bits per wafer, packaging and test, product mix, pricing, and utilization. A dollar of revenue becomes gross profit only if the company sells bits above the fully loaded cost of manufacturing them. Memory fabrication has high fixed costs: cleanrooms, lithography tools, process equipment, depreciation, engineers, materials handling, and yield-learning systems. When demand is strong and fabs are highly utilized, fixed costs are spread across more sellable bits and pricing can rise faster than cost. When supply exceeds demand, average selling prices can fall below fully loaded manufacturing cost, inventory may need to be written down, and gross margin can compress violently. Micron's FY2025 10-K explicitly warns that DRAM and NAND average selling prices have shown very large annual swings over the past five years.

FY2025 segment economics show the starting structure before the extraordinary FY2026 acceleration. CMBU generated $13.52 billion of revenue, $5.87 billion of cost of goods sold, $1.32 billion of R&D, $213 million of SG&A, and $6.13 billion of operating income, for a 45.3% operating margin. The segment's operating leverage was powerful because high-value cloud memory, including HBM, absorbed large fixed costs and carried stronger pricing. CMBU's segment economics are driven by product mix, HBM customer qualifications, advanced packaging supply, DRAM node transitions, and customer willingness to pay for supply assurance.

CDBU generated $7.23 billion of FY2025 revenue, $4.00 billion of COGS, $864 million of R&D, $188 million of SG&A, and $2.18 billion of operating income, for a 30.2% operating margin. CDBU economics are a blend of data center DRAM and data center SSDs. Data center SSDs include NAND, controller, firmware, and sometimes DRAM, so the economics reflect more system-level engineering than raw NAND component sales. In Q2 FY2026, CDBU reported 74% gross margin, helped by pricing, mix, and supply tightness. A sustainable CDBU margin requires both favorable NAND pricing and continued mix shift toward enterprise and cloud storage products where Micron's integration and qualification matter.

MCBU generated $11.86 billion of FY2025 revenue, $8.65 billion of COGS, $836 million of R&D, $390 million of SG&A, and $1.98 billion of operating income, for a 16.7% operating margin. This lower FY2025 margin reflects the more competitive and unit-sensitive character of PC, mobile, and consumer markets. The segment is not structurally bad; it has high-volume products and benefits when pricing improves. But it is more exposed to OEM inventory, device unit cycles, consumer price sensitivity, and substitution among suppliers. In Q2 FY2026, MCBU's reported gross margin was 79%, demonstrating how extreme pricing tightness can overwhelm normal consumer-market cyclicality. The sustainability question is whether on-device AI content growth can keep mix and pricing favorable when supply loosens.

AEBU generated $4.75 billion of FY2025 revenue, $3.57 billion of COGS, $435 million of R&D, $195 million of SG&A, and $557 million of operating income, for an 11.7% operating margin. That margin understates the strategic value of the customer base because automotive and industrial ramps often require long qualification and support cycles. However, these markets are not immune to price cycles. AEBU's Q2 FY2026 gross margin reached 68% as pricing improved. Over a full cycle, the segment's economics should be judged on durability of design-ins, mix shift to higher content vehicles and industrial automation, and the ability to avoid obsolete inventory in long-life products.

At the consolidated level, the latest TTM ending February 26, 2026 shows what happens when the cycle turns sharply in Micron's favor. Revenue was $58.12 billion, gross profit $33.96 billion, operating income $28.09 billion, net income $24.11 billion, operating cash flow $30.65 billion, and adjusted free cash flow $13.56 billion. Those are extraordinary numbers by Micron's own history. The Q2 FY2026 release showed quarterly GAAP gross margin of 74.4% and guided Q3 FY2026 revenue of $33.5 billion plus or minus $750 million with gross margin around 81%. The primer conclusion is not that these margins are normal; it is that supply scarcity, pricing, and AI-driven mix have temporarily made Micron look more like a scarce strategic supplier than a commodity memory maker.

Capital intensity is the counterweight. Micron must keep investing in technology transitions, cleanrooms, HBM packaging, and new capacity. The FY2025 10-K described U.S. expansion plans in Idaho and New York, CHIPS Act direct funding of up to $6.4 billion across U.S. projects and Virginia modernization, a 35% investment tax credit on qualified U.S. semiconductor manufacturing investments, and overseas investments in India, Japan, Singapore, and Taiwan. On the Q2 FY2026 call, management indicated fiscal 2026 capex above $25 billion and a meaningful step-up in fiscal 2027, with construction-related capex increasing by more than $10 billion year over year. For unit economics, this means free cash flow can be large in an upcycle but must be evaluated after the capital required to keep technology and capacity competitive.

4. Demand drivers and market structure

The most important demand driver is AI in data center infrastructure. AI accelerators require high-bandwidth memory near the processor, large pools of DDR or LP memory in server systems, and growing SSD capacity for datasets, vector databases, key-value cache offload, checkpoints, logs, and data movement. Management said in the Q2 FY2026 transcript that data center bits are expected to exceed half of industry TAM in calendar 2026, which would represent a major mix shift in an industry historically driven by PCs, smartphones, and conventional servers. This is why CMBU and CDBU deserve separate attention: AI is not only HBM; it also pulls in server DRAM, LPDRAM, SSDs, and NAND.

HBM is the most visible AI product. Micron shipped HBM3E and has discussed HBM4 for next-generation AI platforms. HBM is harder to manufacture and package than commodity DRAM because it requires stacking, TSV connections, thermal management, yield discipline across the stack, and close platform coordination with accelerator customers. The economic opportunity is attractive, but the trade ratio is significant: wafers directed to HBM may produce fewer conventional DRAM bits, tightening supply elsewhere. Management described this trade ratio and limited cleanroom availability as contributors to industry supply constraints. That means HBM can improve mix while also reducing available supply of non-HBM DRAM, which can support broader pricing in tight periods.

NAND demand is also changing. Historically, NAND cycles were driven by smartphone storage, consumer devices, PCs, client SSDs, and enterprise SSD adoption. Micron now argues that AI workloads are accelerating data center SSD demand. If a data center needs more local high-performance storage for AI data pipelines, inference cache, retrieval systems, or dense storage tiers, NAND becomes part of the AI infrastructure bill, not merely a consumer-electronics component. This is strategically important for CDBU because data center SSD design wins can shift the NAND mix toward higher-value products than commodity removable storage.

Mobile and client demand is less clean. Management warned that in calendar 2026 DRAM and NAND supply constraints could pressure PC and smartphone unit shipments, especially in price-sensitive markets. At the same time, AI PCs and flagship smartphones can carry materially higher memory configurations. The investment question is whether higher content per device offsets weaker units and customer price sensitivity. For the primer, treat MCBU as a cyclical business with an AI content option, not as a pure secular data center compounder.

Automotive and embedded are longer-cycle opportunities. Advanced driver assistance, infotainment, smart cockpits, electrification, industrial automation, and eventually robotics can all increase memory and storage content. Management cited large memory content differences between basic vehicles and high-autonomy vehicles, and described robotics as a potential long-term vector. The risk is timing. Automotive design-ins are slow, industrial cycles can soften, and content-growth narratives can outrun actual production volumes.

5. Competitive landscape and positioning

Micron competes in DRAM mainly against Samsung Electronics and SK hynix, with China-based ChangXin Memory Technologies as an additional strategic factor. In NAND and SSD-related markets it competes against Samsung, SK hynix/Solidigm, Kioxia, Sandisk, YMTC, and others depending on product category and geography. This is not a fragmented industry with many small suppliers. Scale, process technology, capex discipline, IP, and customer qualification are central.

The competitive advantage in memory is not usually brand loyalty in the consumer sense. Customers care about performance, power, density, quality, supply, roadmaps, and price. Micron's potential edge in the current cycle comes from leading-node execution, HBM product qualification, vertically integrated SSD engineering, customer quality scores, and the ability to invest through the cycle. Its vulnerability is that competitors can also add supply, improve nodes, or price aggressively. Government support for domestic semiconductor champions can also distort economics, especially if national-security objectives outrank near-term profitability.

Micron's strategic customer agreements are potentially important because they may reduce one historical weakness of the memory model: the tendency for suppliers to make large capex commitments with only limited forward demand visibility. Management said SCAs include multiyear commitments and are intended to support supply planning and business-model stability. However, the company has not disclosed enough detail to underwrite a permanent margin floor. The correct treatment is cautious: SCAs are a positive sign that customers need assurance, but not proof that the industry has escaped cyclicality.

6. Capital allocation, balance sheet, and governance context

Micron exited Q2 FY2026 with a much stronger balance sheet than in a normal downcycle. The quant foundation reports $12.54 billion of cash and equivalents, $14.62 billion of cash and short-term investments, $2.04 billion of long-term investments, $10.80 billion of total debt, and a net cash position under the FMP convention. The Q2 release reported $16.7 billion of cash, marketable investments, and restricted cash, and management discussed debt reduction, record free cash flow, and a 30% dividend increase. This gives Micron flexibility, but the capital cycle is already demanding.

Capital allocation priority is organic investment. New fabs, HBM packaging, DRAM node transitions, NAND technology transitions, and R&D are not optional if Micron wants to remain competitive. Buybacks and dividends matter, but they are secondary to capacity and technology. The FY2025 10-K notes a $10 billion repurchase authorization, with $7.19 billion already used through FY2025, but also notes restrictions tied to CHIPS Act direct funding agreements. Investors should not assume all upcycle cash flow will be returned quickly; much of it may be reserved for capex, balance sheet strength, and supply commitments.

Governance and management context will be covered in the dedicated management appendix, but the primer-level view is that Micron is led by Sanjay Mehrotra, who became CEO in 2017 and chairman in January 2025. His background includes co-founding and leading SanDisk, which is relevant given Micron's need to manage NAND, SSDs, manufacturing, and storage-product strategy. CFO Mark Murphy joined in 2022 and has emphasized balance sheet strengthening, capex discipline, and returns. The quality question is not whether management understands memory; it does. It is whether management can avoid overbuilding into peak economics while still supplying strategic customers.

7. Key risks a new reader should keep in mind

The largest risk is average selling price cyclicality. Micron can be massively profitable when supply is tight, but history shows that DRAM and NAND prices can decline rapidly. The fixed-cost structure amplifies both directions. If capacity additions, customer inventory digestion, weaker AI capex, or competitor pricing turn the market, gross margin can fall faster than revenue.

The second risk is capex timing. Micron is investing into one of the best demand environments in its history. Those investments may be necessary and rational, especially with customer commitments, but they increase exposure to forecast error. A fab started for a tight market can come online in a weaker one. Government incentives help, but they also bring compliance conditions and do not remove the underlying utilization risk.

The third risk is customer concentration and bargaining power. Roughly half of FY2025 revenue came from the top ten customers, and one customer represented 13% of revenue in the first six months of FY2026, primarily in CMBU. Large cloud and AI customers are economically powerful. They need memory, but they also push suppliers on price, customization, roadmap alignment, and supply commitments.

The fourth risk is geopolitics. Micron sells globally, ships mostly outside the United States, and manufactures across multiple countries. Export controls, China restrictions, tariffs, IP disputes, rare-earth constraints, and local-government incentives can affect revenue, cost, and competitive positioning. The Q2 FY2026 10-Q also discloses significant patent litigation touching DRAM, NAND, SSD, and LPDRAM products.

The fifth risk is technology execution. DRAM node transitions, EUV adoption, HBM stacking, NAND layer scaling, controller/firmware integration, and advanced packaging all create yield and ramp risk. A product can look attractive in slides but fail to achieve profitable volume if yields disappoint or qualification slips.

8. Primer conclusions for downstream synthesis

Micron is best understood as a capital-intensive, technology-led memory manufacturer whose earnings power is currently being reset upward by AI demand and constrained supply. The latest TTM base is not a normal mid-cycle base: $58.12 billion of revenue and $28.09 billion of operating income reflect exceptional pricing, mix, and utilization. CMBU and CDBU now carry

the core AI data center story, with HBM, DDR/LPDRAM, and data center SSDs all relevant. MCBU and AEBU add diversification but remain exposed to end-device cycles, content growth, and pricing.

The investment debate should focus on durability. A buyer of MU at current economics is underwriting some combination of sustained AI infrastructure demand, improved customer commitments, better supply discipline, and Micron execution in HBM, DRAM, NAND, packaging, and capex. A skeptic will argue that memory remains memory: high prices invite capacity, customers eventually digest inventory, and fixed costs punish utilization. Both views can be true over different timeframes. The ER2 synthesis should therefore avoid treating Q2 FY2026 margins as permanent, but it also should avoid anchoring solely on pre-AI cyclicality if SCAs, HBM trade ratios, and data center memory intensity prove durable.

Sources used

- `quant_foundation.md`, especially P1-P6 and reconciliation result, primary source for all financial figures in this primer.
- FMP live pulls saved as `raw/A-FMP-*`, including quote, profile, income statement, balance sheet, cash flow, revenue-product segmentation, stock news, and FY2026 Q2 earnings call transcript.
- Micron FY2025 Form 10-K, SEC EDGAR: https://www.sec.gov/Archives/edgar/data/723125/000072312525000028/mu-20250828.htm
- Micron FY2026 Q2 Form 10-Q, SEC EDGAR: https://www.sec.gov/Archives/edgar/data/723125/000072312526000006/mu-20260226.htm
- Micron fiscal Q2 2026 earnings release, March 18, 2026: https://investors.micron.com/news-releases/news-release-details/micron-technology-inc-reports-results-second-quarter-fiscal-2026
- Micron fiscal Q4 and FY2025 earnings release: https://investors.micron.com/news-releases/news-release-details/micron-technology-inc-reports-results-fourth-quarter-and-full-8

Appendix M - Management Assessment

Micron Technology, Inc. - Management Assessment

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Source provenance and scope

This appendix is written for Production Mode as of April 29, 2026. It uses the Stage 0 fiscal anchor supplied by the orchestrator: Micron's latest reported quarter is Q2 FY2026 ended February 26, 2026; TTM equals Q3 FY2025 plus Q4 FY2025 plus Q1 FY2026 plus Q2 FY2026; the exact five-year horizon ends February 26, 2031. Historical financial and segment anchors are taken from `quant_foundation.md` and `data_package.md`, which are treated as the historical source of record. Management-specific live pulls are preserved as M-prefixed files in `raw/`: the FY2025 DEF 14A, FY2025 10-K, FY2026 Q2 10-Q, FY2026 Q2 earnings 8-K, Micron leadership and IR pages, eight FMP /stable/ earnings-call transcript pulls from Q3 FY2024 through Q2 FY2026, FMP peer profiles, and SEC Form 4 files and summaries for the last twelve months. No cached warehouse data was used.

1. Who is running the company

Micron is run by Sanjay Mehrotra, Chairman, President and Chief Executive Officer. He became president and CEO effective May 8, 2017 after co-founding SanDisk and serving as SanDisk president and CEO from 2011 to 2016. The current strategy is therefore his strategy, not an inherited transition plan. The major decisions he owns include the move from commodity memory volume toward high-value data center DRAM and SSDs, the HBM product and packaging ramp, disciplined supply/capex management after the 2023 downturn, and the long-cycle manufacturing footprint expansion in Idaho, New York, Virginia, Japan, Taiwan, Singapore, and India.

Mark J. Murphy is Executive Vice President and Chief Financial Officer. Micron announced his appointment effective April 18, 2022. Before Micron, he was CFO of Qorvo and had senior finance or operating roles at Delphi Automotive, MEMC Electronic Materials, and Praxair. Murphy has now been CFO through a severe memory downturn, recovery, HBM inflection, debt paydown, dividend increase, CHIPS restrictions, and the new FY2025 segment reporting structure. That is enough tenure to evaluate his capital allocation behavior, though not as long as Mehrotra's CEO record.

The senior operating bench is relevant because Micron is an execution business. Manish Bhatia is EVP, Global Operations; Scott J. DeBoer is EVP, Chief Technology and Products Officer; Sumit Sadana is EVP and Chief Business Officer; Mike Cordano is EVP, Worldwide Sales; April Arnzen is EVP and Chief People Officer; and Michael Ray is Chief Legal Officer and Corporate Secretary. Micron does not disclose segment CEOs in the appendix source set, so the practical segment owners are the operations, technology/product, sales, and business heads who control roadmap, yield, qualification, customer allocation, and commercial mix across CMBU, CDBU, MCBU, and AEBU.

Board oversight is credible but not perfect. The 2025 proxy says eight directors were nominated, with seven independent nominees and Mehrotra as the single employee director. The board combined the Chair and CEO roles in January 2025 and appointed Lynn A. Dugle as Lead Independent Director. Dugle is a former Engility CEO and Raytheon executive, has roughly five years of Micron board tenure, leads independent sessions, may call board and independent-director meetings, and leads CEO performance and succession discussions. That mitigates, but does not erase, the governance caution from a combined Chair/CEO structure.

2. Tenure and track record

Mehrotra has been CEO for nearly nine years as of the April 2026 anchor. He owns the current portfolio, capital plan, and culture. His three biggest Micron decisions are clear.

First, he shifted the portfolio toward high-value data center memory and storage. The numbers in the source-of-record files show that CMBU revenue grew from $1.87 billion in FY2023 to $13.52 billion in FY2025, and CMBU operating margin moved from negative 41.0% to positive 45.3%. TTM CMBU revenue through Q2 FY2026 reached $20.96 billion with 56.1% operating margin. CDBU also improved from $2.12 billion of FY2023 revenue and negative 26.5% operating margin to $7.23 billion and 30.2% in FY2025, then $11.17 billion TTM at 48.3% margin. This is the strongest evidence for management quality: the company caught a major architecture shift and converted it into disclosed segment economics.

Second, management held supply and capex discipline through the 2023 downturn instead of chasing bit share. FY2023 revenue fell to $15.54 billion, operating income was negative $5.75 billion, and ROIC was negative 10.1%. Capex was cut to $7.68 billion from $12.07 billion in FY2022, while R&D was maintained around $3.11 billion. That was painful, but the response was economically rational. By FY2025, revenue was $37.38 billion, operating income was $9.77 billion, and ROIC recovered to 15.7%.

Third, management is now making a very large bet on AI-era supply: CHIPS-backed U.S. fabs, HBM advanced packaging, the Tongluo acquisition, and higher FY2026-FY2027 capex. This is the right strategic direction if multiyear strategic customer agreements and AI memory intensity persist, but it is the largest forward risk in the management assessment. Q2 FY2026 TTM operating cash flow was $30.65 billion and TTM adjusted free cash flow was $13.56 billion, so the investment is funded from strength. The risk is not balance-sheet panic; it is cycle timing, project execution, and avoiding oversupply by 2028-2031.

Murphy's CFO record is constructive. During Q1 FY2026 and Q2 FY2026, management reduced debt by $2.7 billion and $1.6 billion, respectively, while repurchasing only $300 million and $350 million of shares as permitted by CHIPS terms. The Q2 call prioritized organic investment, balance-sheet strength, dividend growth, and then repurchases to offset dilution or act opportunistically. That is the correct order for a cyclical manufacturer entering a capacity build.

3. Capital allocation behavior

From data package Section 7, Micron's last five fiscal years show capex of $10.03 billion, $12.07 billion, $7.68 billion, $8.39 billion, and $15.86 billion from FY2021 through FY2025. R&D rose from $2.66 billion to $3.80 billion over the same period. Buybacks were $1.20 billion in FY2021, $2.43 billion in FY2022, $0.42 billion in FY2023, $0.30 billion in FY2024, and zero in FY2025. Dividends were zero in FY2021 and roughly $0.46-$0.52 billion annually from FY2022 through FY2025. No material M&A was identified in the annual filings during the five-year period, though the Q2 FY2026 10-Q records the Tongluo fab acquisition for $1.8 billion.

This allocation pattern is internally consistent. Management bought back stock in stronger periods, largely stopped in FY2025 as capex and CHIPS restrictions mattered more, preserved R&D through the downturn, and is now shifting cash toward productive capacity. The FY2026 dividend increase of 30% is not large enough to crowd out capex. The repurchase record is not clearly opportunistic at a per-share value level; it is more a residual cash-return tool that was constrained when the capital plan became more demanding. That is acceptable for Micron but not a source of exceptional capital-allocation alpha.

The Tongluo acquisition is the one recent M&A decision requiring monitoring. The Q2 FY2026 10-Q states the site was acquired from Powerchip for $1.8 billion, and the Q2 call said meaningful product shipments from the existing fab are expected in FY2028. This is a capacity and timing transaction, not a synergy acquisition. It should be judged by whether it accelerates HBM/DRAM supply without creating a stranded asset if the market cools.

4. Compensation alignment

The compensation plan is better aligned than a generic revenue-growth plan. The FY2025 proxy says CEO long-term incentives are 65% performance-based restricted stock units and 35% time-based restricted stock awards; other named officers are 50% PRSUs and 50% RSAs. The 2025 PRSU design allocates 25% to HBM3E+ market share or bit shipments, 25% to data center SSD market share or bit shipments, and 50% to relative TSR versus the SOX Index. The rTSR target is the 55th percentile, with a cap at target if absolute TSR is negative. Operational PRSUs have a three-year performance period with cliff vesting, and the combined PRSU payout is capped at 200% of target.

Short-term incentives are more mixed but still reasonable. FY2025 STI was split between profitability goals and strategic goals. The profitability goal achieved below target at 95%, despite record revenue, because non-GAAP operating margin was below target. Strategic goals included technology/product milestones, cost and efficiency, customer metrics, revenue mix, sustainability, human capital, and AI deployment. Some targets are confidential, which limits external auditability, but the disclosed categories are tied to HBM, leading nodes, data center SSDs, construction milestones, customer quality, inventory, and revenue mix. That is the right scorecard for Micron's current value drivers.

Ownership is meaningful. The proxy reports Mehrotra beneficially owned 1,084,078 shares as of October 31, 2025, and Murphy owned 219,693 shares. Executive ownership guidelines require the CEO to hold six times base salary and other executives three times base salary; the proxy says all executive officers were in compliance. The policy excludes unexercised options and unearned performance awards from ownership compliance. Micron also has a clawback policy, prohibits insider hedging and pledging, and states no special retirement benefits or excessive perquisites.

Dilution is not an obvious abuse. Data package share counts were 1,141 million in FY2021, 1,122 million in FY2022, 1,093 million in FY2023, 1,118 million in FY2024, and 1,125 million in FY2025. SBC is not negligible, but the share count has not compounded upward in a way that would override ownership alignment.

5. Disclosure quality and candor

The last eight FMP /stable/ transcripts show a management team that usually answers operational questions directly, with numbers when numbers are already disclosed, and with explicit confidentiality boundaries when customer agreements or competitive targets are sensitive. The Q3 FY2024 call addressed HBM yield concerns directly: management acknowledged normal new-product yield ramp dynamics, stated first-quarter HBM revenue was above $100 million, and kept the goal of reaching DRAM-share-like HBM share in 2025. The Q4 FY2025 call reviewed prior promises from March 2024 and compared them with FY2025 results: record revenue, 49% revenue growth, 17 percentage points of gross-margin expansion, and a data-center product mix shift.

Guidance discipline is strong over the reviewed period. Q3 FY2024 revenue, gross margin, and EPS were above the high end of guidance. Q4 FY2024 revenue was at the high end, while gross margin and EPS were above the high end. Q4 FY2025 again beat the high end of updated guidance on revenue, gross margin, and EPS. Q2 FY2026 guidance exceeded the full-year revenue of every fiscal year through FY2024, and actual Q2 FY2026 results were materially above the prior year across revenue, margin, EPS, operating cash flow, and free cash flow. This pattern does not prove permanent forecasting skill in a cyclical upturn, but it does show conservative enough guidance during the recovery phase.

Question handling is mostly good. On gross margin sustainability, Murphy separates price, mix, HBM, supply tightness, and incremental margin rather than hiding behind generic demand commentary. On SCAs, Mehrotra does not disclose pricing or cancellation terms, but he clearly states they are multiyear agreements with specific commitments and robust terms, and he explains why LTAs were not enough. On customer allocation, he acknowledges that some customers are receiving only 50% to two-thirds of requested demand. That is candid by semiconductor management standards.

The disclosure limitation is product granularity. HBM and data center SSD are central to the thesis, but full dollar histories are not disclosed. Some compensation targets are also withheld as competitively sensitive. This is not evasive enough to fail the gate, but it means the investor must triangulate from segment economics, call commentary, and future margins.

6. Strategic coherence

Micron's stated strategy is coherent with its investment pattern. The FY2025 10-K describes Micron as focused on customers, technology leadership, manufacturing, and operational excellence across DRAM, NAND, and NOR. The current version of that strategy is AI memory infrastructure: HBM, high-capacity DIMMs, LP server DRAM, data center SSDs, leading DRAM and NAND nodes, and advanced packaging. The capex plan supports that strategy. FY2026 capex is expected above $25 billion, and FY2027 construction-related capex is expected to rise by more than $10 billion year over year. That matches the HBM, data center DRAM, and strategic customer agreement narrative.

The strategy is not a sequence of pivots. It is a portfolio mix upgrade inside the same core competency: memory and storage process technology, packaging, customer qualification, and manufacturing scale. The FY2025 segment reorganization into CMBU, CDBU, MCBU, and AEBU improves accountability because it matches end markets rather than only legacy product silos. Management also names constraints directly: tight DRAM supply, NAND mix improvement, CHIPS covenants, customer allocation, consumer price elasticity, and confidentiality limits around SCAs.

7. Governance flags

No related-party transaction red flag was identified. The FY2025 proxy states that there were no actual or proposed related-person transactions with a direct or indirect material interest since the beginning of FY2025. Micron has one-share/one-vote common equity; no dual-class control issue was identified in the source set. The FY2025 10-K states management concluded internal control over financial reporting was effective as of August 28, 2025, PwC audited that effectiveness, and no Q4 FY2025 internal-control changes materially affected or were reasonably likely to materially affect controls. No recent SEC enforcement, restatement, or material weakness was found in the M-owned SEC pulls.

The governance flags are softer. First, Chair and CEO are combined. Dugle's lead independent director role is substantive, and seven of eight nominees are independent, but the structure reduces formal separation. Second, insider selling is material in dollars. SEC Form 4 aggregation for the last twelve months shows sales by multiple executives, including roughly 192,500 shares sold by Mehrotra for about $36.1 million, 160,000 shares by Murphy for about $32.1 million, 141,638 shares by Sadana for about $32.5 million, 122,000 shares by DeBoer for about $23.0 million, and 106,623 shares by Bhatia for about

$20.3 million. Many sales occurred after a large stock-price move, and several filings indicate 10b5-1 plan use, especially for Mehrotra and some other executives. This is not a governance fail because ownership remains meaningful and tax-withholding Form 4s are also present, but the breadth of selling is a yellow monitoring item.

8. Peer comparison

Against realistic alternatives, Mehrotra ranks well on five-year stewardship. David V. Goeckeler at Sandisk is a relevant NAND/storage peer, but Sandisk's standalone public-company track record is newly reset after separation and is not as seasoned as Mehrotra's Micron record. William David Mosley at Seagate is an experienced storage CEO with strong capital return discipline, but Seagate's HDD economics are structurally different and less directly comparable to HBM-driven memory. Lip-Bu Tan at Intel is a high-credibility semiconductor leader, but Intel is in a larger turnaround with more unresolved manufacturing and foundry complexity.

On per-dollar capital allocation, Micron is not flawless because memory remains capital-intensive and the 2023 downturn produced negative ROIC. Still, the HBM/data-center portfolio move has produced visible segment margins and TTM operating income of $28.09 billion on $58.12 billion of TTM revenue. That gives Mehrotra a better recent stewardship score than most storage and semiconductor turnaround alternatives. On communication transparency, Micron is better than many Asian memory peers because U.S. filings, segment tables, transcripts, and compensation design are detailed; however, product-level HBM and SSD dollars remain limited.

9. Management gate verdict

Management gate: PASS.

This is a PASS because the CEO is long-tenured, owns the current strategy, and has converted a severe FY2023 downturn into a high-margin AI memory cycle with disclosed segment improvement, strong cash generation, and a balance sheet moving from debt reduction to net cash. Compensation is meaningfully aligned with HBM, data center SSD, rTSR, ownership guidelines, anti-hedging rules, and clawback provisions. Disclosure is candid enough on guidance, gross margin drivers, supply constraints, and customer commitments, though product-level dollars remain limited. The gate is not a clean compounder-style pass because Micron's economics remain cyclical, current capex is very large, Chair/CEO roles are combined, and insider selling is broad. Those are monitoring flags, not disqualifiers.

Appendix W - Moat and 2046 Durability

Micron Technology, Inc. - Moat and 2046 Durability

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Source basis and live-pull compliance

Stage 0 anchor: today is 2026-04-29. Micron uses a 52/53-week fiscal year ending on the Thursday closest to August 31. The latest quarter is Q2 FY2026, ended February 26, 2026. TTM is Q3 FY2025 + Q4 FY2025 + Q1 FY2026 + Q2 FY2026, ending February 26, 2026. The five-year ER2 forward horizon is February 26, 2031. The 2046 durability test date is April 29, 2046.

This W appendix uses `quant_foundation.md` and `data_package.md` as the historical source of record, as instructed. It also created W-owned live source files under `raw/`: `W-FMP-income-statement-annual.json`, `W-FMP-key-metrics-annual.json`, `W-FMP-revenue-product-segmentation-annual.json`, `W-FMP-transcript-FY2026-Q2.json`, `W-SEC-10K-FY2025-mu-20250828.htm`, `W-SEC-10Q-FQ2-2026-mu-20260226.htm`, `W-Micron-IR-FQ2-2026-release.html`, `W-Micron-IR-FQ4-2025-release.html`, and `W-source-excerpts.txt`. No data-warehouse cache was used. The two available segment appendices, `appendix_B_cloud_memory_business_unit.md` and `appendix_B_compute_and_networking_business_unit.md`, are still placeholders, so this appendix does not claim to integrate completed B-agent competitive-dynamics work. Segment conclusions below come from the verified QF/D source record, the primer's orientation, and live W pulls from FMP, Micron IR, and SEC EDGAR.

1. Moat taxonomy applied

Micron's moat is not a consumer brand moat and not a network effect. It is a scale, process, manufacturing, customer-qualification, and capital-access moat inside an oligopolistic but still cyclical memory industry. The most defensible parts are CMBU and parts of CDBU, where HBM, server DRAM, LPDRAM, and data center SSDs are tied to AI platform roadmaps, tight supply, advanced packaging, and high-value customer qualification. AEBU has a smaller but real reliability and lifecycle moat in automotive and industrial design-ins. MCBU has weaker protection because PCs, smartphones, and consumer/client storage remain more exposed to device units, OEM bargaining power, and component substitution.

Network effects are weak. A Micron DRAM or NAND device does not become more valuable because more users adopt it in the way a software platform does. There are ecosystem effects around JEDEC standards, controller firmware, platform qualification, and accelerator roadmaps, but those are better understood as certification and coordination costs than network effects. HBM is the closest exception: winning a platform with a leading AI accelerator customer creates roadmap learning, validation, and supply-planning advantages that may help the next generation. Even there, the buyer can dual-source over time if Samsung or SK hynix qualify comparable products. Treat network effects as limited and mostly indirect.

Switching costs are real but uneven. Memory customers can switch suppliers at the category level, yet a specific qualified product in an AI accelerator, data center SSD, automotive control unit, or industrial module is not frictionless to replace. Qualification consumes engineering resources, creates reliability and thermal validation work, and ties into the customer's production ramp. Switching costs are strongest in CMBU HBM and AEBU automotive/industrial. They are moderate in CDBU data center SSDs, where controller, firmware, endurance, power, and compatibility matter. They are weakest in standard PC/client and commodity NAND/DRAM configurations, where multiple suppliers can compete more directly on price once products meet specification.

Scale economies are the core moat. Micron's fabs, process R&D, yield learning, equipment access, and advanced packaging investments require tens of billions of dollars and multi-year execution. The data package shows capex of $10.03B in FY2021, $12.07B in FY2022, $7.68B in FY2023, $8.39B in FY2024, and $15.86B in FY2025, with management guiding FY2026 capex above $25B on the Q2 FY2026 call. That capital burden excludes many would-be entrants. It also cuts both ways: scale protects Micron from small competitors, but it does not protect the industry from oversupply if the existing giants all expand at peak-cycle margins.

Brand is not a material moat for enterprise value. Crucial has consumer-channel recognition, and Micron's name matters for trust with OEMs and cloud buyers, but customers buy performance, quality, density, power, endurance, roadmap, availability, and price. A buyer will not pay a durable premium for the Micron name alone if a qualified Samsung or SK hynix product is cheaper and performs as well. Brand supports procurement credibility; it is not the moat.

Regulatory position is a mixed support, not a moat by itself. CHIPS Act incentives and government interest in domestic semiconductor manufacturing can lower capital burden and improve strategic relevance, especially in the United States. But incentives come with restrictions and compliance obligations, and foreign governments may support competitors. Regulation can help Micron fund capacity, but it can also encourage parallel national capacity that weakens industry returns. The regulatory lens is therefore a balance-sheet and geopolitical factor, not a durable exclusive license.

IP and patents matter, but they are not sufficient alone. DRAM, NAND, HBM, controller firmware, packaging, and manufacturing process IP are central to staying competitive. Patent litigation is active in Micron's SEC filings, which confirms both the value and contested nature of the IP stack. The moat is not that Micron owns unassailable patents; it is that patents, process know-how, yield learning, and manufacturing recipes compound over decades. A patent portfolio slows attackers and supports cross-licensing, but it does not prevent Samsung, SK hynix, Kioxia, Sandisk, CXMT, or YMTC from competing.

High-trust procurement is meaningful in the strongest segments. AI cloud customers, automotive OEMs, and industrial customers need supply continuity and reliability. Micron's Q2 FY2026 transcript describes strategic customer agreements with multiyear commitments, which is important because Micron's own 10-K says customers have historically resisted long-term fixed-price purchase contracts. The emergence of SCAs suggests memory is becoming a supply-assurance product in AI infrastructure, not merely a spot-priced component. The terms are not disclosed, so this cannot be underwritten as a permanent margin floor, but it is evidence that the moat is improving where customer downtime or product delay is expensive.

2. Per-segment moat

CMBU is the strongest moat segment. It serves large hyperscale cloud customers and includes HBM for all data center customers. The moat is advanced DRAM technology, HBM stacking and yield, platform qualification with accelerator customers, limited cleanroom and packaging capacity, and a customer need for guaranteed supply. On the latest TTM base, CMBU generated $20.96B of revenue and $11.75B of operating income, a 56.1% operating margin. FY2025 margin was already strong at 45.3%, and Q2 FY2026 business-unit gross margin reached 74% per the data package. Durability is good over five years, plausible over ten, and uncertain over twenty because competitor catch-up and capacity additions remain real. The earliest break signal would be HBM share loss, failure to qualify next-generation HBM with leading AI accelerator platforms, or management commentary that SCA commitments are rolling off into spot pricing.

CDBU has a solid but less pure moat. It serves data center memory outside the largest hyperscalers and data center storage for all data center customers. The moat is a mix of data center DRAM qualification, data center SSD design, controller/firmware integration, endurance/power/reliability validation, and customer relationships. The latest TTM table shows $11.17B of revenue and $5.40B of operating income, a 48.3% operating margin, but FY2025 margin was 30.2%, so some of the current profitability is clearly cycle and mix. Durability is good for five years if AI data pipelines continue to lift SSD demand; ten-year durability depends on NAND supply discipline and Micron's ability to stay relevant in enterprise/cloud SSD qualifications. The break signal would be data center SSD share reversal, NAND pricing deterioration despite AI storage demand, or customers shifting more value to controllers and system integrators.

MCBU is a lower-moat segment with an AI content option. It serves mobile and client memory/storage. The moat is mainly scale, LPDDR and client SSD qualification, OEM relationships, and the ability to deliver high-volume products at competitive cost. FY2025 operating margin was 16.7%, but latest TTM margin rose to 49.7% during an extreme pricing upcycle. That margin should not be treated as normalized moat evidence. MCBU can benefit from AI PCs and phones needing more DRAM and NAND content, but PC and smartphone units may decline or stagnate, and customers are price sensitive. Durability is acceptable over five years, weaker over ten, and not strong enough alone for a 2046 pass. The early warning signal is falling content growth per device or OEMs delaying high-memory AI configurations in mainstream price bands.

AEBU is smaller but strategically defensible. It serves automotive, industrial, and consumer embedded markets. The moat is reliability, long product lifecycles, qualification, temperature and endurance requirements, customer support, and the cost of requalifying mission-critical components. FY2025 operating margin was only 11.7%, but Q2 FY2026 gross margin reached 68% as pricing improved. The long-term durability may be better than the current margin suggests because advanced driver assistance, smart cabins, industrial automation, and robotics can increase memory content over time. The break signal would be design-win losses in automotive/industrial programs, inventory corrections in embedded markets, or Chinese competitors gaining qualified supply positions in lower-end industrial applications.

The blended company moat is weaker than CMBU alone. CMBU and CDBU now carry much of the current earnings power, but MCBU remains large and more cyclical, and AEBU is too small to offset a memory pricing downturn by itself. The equity cannot be valued as if all revenue were HBM or data center SSD. Micron is a much better business when AI memory and data center storage are allocation-constrained; it is still a memory manufacturer when supply catches up.

3. Margin persistence evidence

Margin persistence is mixed. Consolidated operating margin was 22.7% in FY2021, 31.5% in FY2022, negative 37.0% in FY2023, 5.2% in FY2024, and 26.1% in FY2025. The latest TTM ending February 26, 2026 is exceptional: revenue of $58.12B, operating income of $28.09B, and operating margin of 48.3%. Q2 FY2026 itself showed GAAP operating margin of 67.6% and GAAP gross margin of 74.4%. These numbers demonstrate operating leverage and scarcity pricing, not stable through-cycle economics.

Segment margins tell the same story. In current taxonomy, CMBU moved from negative 41.0% in FY2023 to 6.4% in FY2024 and 45.3% in FY2025; latest TTM was 56.1%. CDBU moved from negative 26.5% to 5.1% to 30.2%, with latest TTM at 48.3%. MCBU moved from negative 43.1% to roughly breakeven to 16.7%, with latest TTM at 49.7%. AEBU was steadier but still moved from 16.4% in FY2023 to 9.3% in FY2024 to 11.7% in FY2025, then 39.0% on the latest TTM. The evidence supports a moat in scale, technology, and qualification, but not a software-like durable margin floor.

The moat interpretation is therefore conditional. Micron has earned high margins when supply is tight and product mix favors advanced memory. It has not shown high and stable returns across the full cycle. ROIC in the data package was 14.6% in FY2021, 19.4% in FY2022, negative 10.1% in FY2023, 2.0% in FY2024, and 15.7% in FY2025. That record is below the Gideon ideal of persistent 20%+ ROIC for 20 years. The current AI cycle may structurally improve the average, but the historical record demands a yellow flag.

4. AI disruption stress test

Micron is protected from direct AI workflow substitution. Its value is not a prompt-to-output workflow; it is physical capacity, process technology, packaging, yield, qualification, and trusted supply in memory and storage. Foundation models do not replace HBM stacks, server DRAM, data center SSDs, automotive memory, or NAND bits. AI may improve chip design, process control, yield learning, demand forecasting, and customer engineering, but it does not dissolve the need for physical memory close to compute.

CMBU is platform-adjacent and protected. AI increases the need for bandwidth, capacity, and energy-efficient data movement. HBM and advanced server memory are chokepoint hardware in accelerator systems. The risk is not AI disintermediation; it is AI platform concentration and customer bargaining power. If a few accelerator and cloud customers control roadmaps and allocate share among qualified suppliers, Micron may be strategically important but still price-constrained.

CDBU is also platform-adjacent. AI workloads need storage for datasets, checkpoints, retrieval, inference caches, logs, and tiered data movement. Data center SSDs should benefit if AI infrastructure shifts more storage from lower-performance media toward high-density SSDs. The disruption risk is that storage architectures change in ways that reduce NAND value capture, or that SSD controller/software layers capture more economics than NAND manufacturing. Still, the physical-density and power-efficiency need is durable.

MCBU is the most exposed segment. AI PCs and AI smartphones can lift memory content, but device units are cyclical and user willingness to pay for on-device AI is not proven across all price points. If cloud-side inference remains dominant or low-cost devices avoid high-memory configurations, the content-growth thesis could disappoint. MCBU is not disrupted by AI in the sense of replacement, but it is exposed to AI adoption timing and OEM price elasticity.

AEBU is protected by physical and reliability requirements. Advanced driver assistance, autonomous features, smart cabins, industrial automation, and robotics all need memory and storage near compute. AI expands the addressable memory content in these systems. The downside is timing and qualification: automotive and industrial ramps take years, and customers may resist rapid price increases. The protected segment is CMBU; the most exposed is MCBU.

5. The 2046 test

On April 29, 2046, the plausible bullish description of Micron is this: Micron designs, manufactures, packages, and sells high-bandwidth memory, large-capacity system memory, persistent storage, embedded memory, and reliability-qualified memory systems for AI data centers, edge AI devices, vehicles, robotics, industrial automation, and secure infrastructure. Its largest customers are cloud and AI infrastructure operators, accelerator platform owners, server and storage OEMs, automotive OEMs and tier-one suppliers, industrial automation companies, and selected mobile/client OEMs. CMBU still exists in some form, though it may be organized around AI system memory rather than today's HBM naming. CDBU remains relevant because data-intensive AI systems still require high-performance storage near compute. AEBU has likely grown in importance as vehicles, robots, factory equipment, and edge devices use more memory and storage. MCBU still exists but is

lower quality unless on-device AI creates a persistent premium content tier.

In that 2046 bull case, operating margin is lower than Q2 FY2026 but structurally higher than old commodity downcycles. The reason is not that memory stopped being cyclical; it is that advanced memory became a strategic supply category with longer commitments, higher qualification friction, and a larger share of demand tied to capital-intensive AI infrastructure. Micron still makes money because three moats remain intact: scale-manufacturing economics, process and packaging know-how, and high-trust customer qualification in mission-critical systems.

The bear-case 2046 description is equally concrete. Micron remains a capable memory producer, but the industry has repeated the historical pattern: high prices invited capex, government incentives funded excess capacity, Chinese and Korean competitors gained share, HBM became more standardized, AI customers dual-sourced aggressively, and NAND stayed structurally oversupplied. In this world, Micron sells useful hardware but earns volatile mid-cycle returns, with occasional boom years and severe downturns. The platform shift is not AI replacing memory; it is AI customers using their scale, proprietary accelerator roadmaps, and multi-sourcing leverage to capture most of the economics while memory suppliers absorb capex risk.

Probability: the bull 2046 case is plausible but not certain enough for an unqualified PASS. Micron has a credible role in 2046 because physical memory and storage intensity should grow with AI, autonomy, robotics, and edge compute. But the 20-year test remains yellow because memory has a long history of cyclicality, customers are concentrated, and supply additions can destroy pricing power. The 2046 description is specific and credible; the uncertainty is whether the economics will meet the Gideon standard of durable high returns.

6. Competitive threat inventory

Threat	Mechanism	Segment(s) affected	Earliest observable signal	Plausibility
HBM and advanced DRAM catch-up by Samsung/SK hynix	Competitors qualify comparable HBM generations and use supply/pricing to regain share	CMBU	Micron loses next-gen HBM platform slots or reports lower HBM mix/pricing despite AI demand	High
NAND/data center SSD oversupply	Capacity and layer transitions expand supply faster than AI storage demand	CDBU, MCBU, AEBU	NAND ASPs fall, SSD margins compress, data center SSD share gains stall	High
China-supported entrants and geopolitics	National champions add capacity or restrictions affect Micron sales/sourcing	All, especially commodity DRAM/NAND and China-exposed demand	Export controls, CAC-type restrictions, accelerated CXMT/YMTC qualification	Medium-high
Customer concentration and bargaining power	Cloud/AI customers demand multiyear supply but pressure price and roadmap terms	CMBU, CDBU	SCAs disclose lower economics, top-customer share rises, pricing decouples from tight supply	Medium-high
Capex timing error	Micron builds for peak demand and new capacity arrives in weaker cycle	All	Inventory days rise, capex remains elevated while gross margin rolls over	Medium-high

7. Pricing power verification

Pricing power is observable today but not proven permanent. The strongest evidence is Q2 FY2026: the 10-Q says DRAM sales rose 74% sequentially, driven primarily by a mid-60% ASP increase and modest bit growth, while NAND sales rose 82% sequentially, driven primarily by a high-70% ASP increase and low-single-digit bit growth. Versus the prior-year quarter, DRAM revenue rose 207% and NAND revenue rose 169%. The IR release also reported record revenue, gross margin, EPS, and free cash flow. These are clear indicators that Micron had pricing power in the current supply environment.

The problem is durability. The FY2025 10-K says customers have historically been reluctant to enter long-term fixed-price purchase contracts, and that pricing, quantity, and terms are typically renegotiated with market conditions. That is the opposite of a clean pricing-power moat. The new SCA discussion is encouraging because customers need supply assurance for AI infrastructure, but the terms are not disclosed and may still share economics heavily with customers. Therefore pricing power is strong near term, particularly in CMBU and CDBU, but weak as a permanent through-cycle assumption.

Segment-level gross margin evidence is powerful but cyclical. Q2 FY2026 gross margins were 74% for CMBU, 74% for CDBU, 79% for MCBU, and 68% for AEBU. Those levels cannot all be attributed to structural moat; MCBU at 79% is clearly an upcycle/tight-supply result in a normally more competitive segment. The right conclusion is that Micron can monetize scarcity extremely well, and that AI demand has made scarcity more strategic. It is not yet proof that Micron can hold premium

margins after supply normalizes.

Contract structure is the swing factor. If SCAs include enforceable multiyear volume and economic commitments that protect Micron's returns on capacity, the moat improves materially. If SCAs are mainly allocation tools with periodic pricing resets, they improve visibility but not the long-term margin floor. Because Micron has not disclosed enough contract detail, this appendix treats SCAs as positive evidence with limited underwriting weight.

8. Moat verdict

Moat gate: YELLOW. Micron has a real moat in scale manufacturing, process know-how, advanced packaging, customer qualification, and trusted supply, with CMBU and CDBU carrying the strongest evidence. The gate is not a full PASS because the historical margin/ROIC record is still cyclical, customers retain bargaining power, and current pricing power is unusually favorable.

2046 test: YELLOW. A specific 2046 Micron can be described: a strategic memory and storage manufacturer for AI infrastructure, vehicles, robotics, industrial automation, edge compute, and selected client/mobile devices. That future business plausibly still makes money through scale, qualification, and advanced memory technology, but the probability of commodity-cycle reversion, overbuild, and customer value capture is too high for a clean durability pass.

The practical ER2 implication is that Micron should not receive a software-style moat multiple. The moat is real enough to avoid a fail: AI does not replace Micron's products, and physical memory/storage intensity is a long-duration demand driver. But the correct investment hurdle is stricter than "Micron is an AI winner." The thesis must prove that peak-cycle economics can normalize into durable high returns after the February 26, 2031 horizon, not merely that Q2 FY2026 was extraordinary.

Appendix B1 - CMBU

Cloud Memory Business Unit (CMBU) - Segment Deep Dive

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0. Segment boundary + taxonomy note

CMBU is Micron's Cloud Memory Business Unit. Under the FY2025 reorganization, it is focused on "memory solutions for large hyperscale cloud customers, and HBM for all data center customers" [data_package Section 1, CMBU row; quant_foundation P-Taxonomy, CMBU row]. This segment is not a continuation of the old CNBU line. Micron began managing under the current market-segment business-unit structure in Q4 FY2025, and the FY2025 10-K retrospectively adjusted FY2023-FY2025 segment amounts into the new CMBU/CDBU/MCBU/AEBU taxonomy [data_package Section 1, taxonomy paragraph]. FY2021-FY2022 remain legacy CNBU/MBU/EBU/SBU and are not spliced into current CMBU growth rates. The modeling boundary is therefore: historical segment dollars from FY2023-FY2025 current taxonomy, TTM from Q3 FY2025 through Q2 FY2026 ending February 26, 2026, and FY+5 horizon exactly February 26, 2031.

1. What this segment actually is

CMBU is the part of Micron that sells high-value memory into the cloud data-center market where the customer set is concentrated, technically demanding, and capacity hungry. The segment has two practical demand pools. The first is conventional server and cloud memory sold to large hyperscale customers: DDR5 server DRAM, high-capacity modules, low-power or power-optimized memory, and related cloud qualification work. The second is high bandwidth memory, or HBM, sold for all data-center customers, including accelerator platforms that need memory stacked near GPUs or custom AI accelerators.

The customer problem is straightforward: AI training, inference, recommender models, search, and high-performance compute are increasingly memory-bound. The accelerator alone does not determine system throughput; memory bandwidth, capacity, power efficiency, qualification reliability, and supply assurance determine whether a cloud customer can deploy useful clusters at scale. That is why CMBU is not merely "DRAM revenue." DRAM crosses multiple Micron segments, including mobile, client, automotive, industrial, graphics, and broader data-center applications [data_package Segment-to-product guardrails, DRAM row]. CMBU is a customer-and-use-case segment inside that wider DRAM technology base. It captures large hyperscale memory demand plus HBM for data-center customers, while CDBU captures mid-tier cloud, enterprise, OEM data-center memory and data-center storage [data_package Segment-to-product guardrails, CMBU and CDBU rows].

Pricing is not a pure spot-commodity model for the most important CMBU lines. Commodity DRAM still affects the cycle, and contract pricing can move sharply when industry supply/demand swings. But HBM and leading server DIMM supply are closer to allocation businesses: customers commit volumes, suppliers reserve wafer starts, and qualification locks are meaningful because changing memory architecture on an accelerator platform is expensive. Micron's management commentary in the data package supports this framing. In Q1 FY2026, management said HBM calendar 2026 volume and pricing had been completed with customers; the data package records the short quote "sold out" [data_package Section 6, CMBU / HBM Q1 FY2026 row]. In Q2 FY2026, management framed memory as a "strategic asset" for AI customers [data_package Section 6, CMBU / HBM / cloud memory Q2 FY2026 row]. Those are not normal commodity-channel signals.

Go-to-market is direct, technical, and platform-qualified. Hyperscale customers care about total cost of ownership at the rack and cluster level, not only memory price per bit. For HBM, the supplier must coordinate with accelerator roadmaps, advanced packaging constraints, substrate and logic-interface specifications, and customer qualification windows. For conventional hyperscale cloud memory, the product must meet density, reliability, power, and thermal requirements across server fleets. The economic center of CMBU is therefore the ability to win qualified positions at leading cloud customers and then secure enough wafer, assembly, test, and packaging capacity to ship at committed volumes.

2. Current economics (FY2025 and TTM)

CMBU has become Micron's largest and highest-margin reportable segment in the current cycle. In FY2025, it generated $13.52B of revenue, equal to 36.2% of Micron's FY2025 revenue, with $6.13B of operating income and a 45.3% operating margin [data_package Section 1, CMBU row; Section 3, CMBU Revenue, Operating income, and Operating margin rows].

The comparable current-taxonomy history is short but dramatic: CMBU revenue rose from $1.87B in FY2023 to $3.79B in FY2024 and $13.52B in FY2025. The FY2024 YoY growth was 102.6%, and FY2025 YoY growth was 256.6% [data_package Section 3, CMBU Revenue and YoY rows]. Operating income moved from a $0.77B loss in FY2023 to $0.24B profit in FY2024 and $6.13B in FY2025 [data_package Section 3, CMBU Operating income row].

The TTM anchor is even stronger. Quant foundation P4 constructs current reportable-segment TTM from FY2025 annual less FY2025 H1 plus FY2026 H1. Under that construction, CMBU TTM revenue is $20.962B, TTM operating income is $11.754B, and TTM operating margin is 56.1% [quant_foundation P4, TTM by current reportable segment, CMBU row]. The quarterly trend explains why TTM economics are above FY2025. Data package Section 5 lists CMBU revenue of approximately $3.43B in Q3 FY2025, $4.50B in Q4 FY2025, $5.30B in Q1 FY2026, and $7.70B in Q2 FY2026 [data_package Section 5, CMBU quarterly rows]. Q3 FY2025 is derived because standalone current-taxonomy segment revenue was not separately released before the Q4 reorganization; that bridge is approximate and explicitly flagged by the data package [data_package Section 10, Q3 FY2025 standalone segment gap]. Q4 through Q2 were disclosed as rounded revenue on calls/releases, and CMBU gross margin improved from 59% in Q4 FY2025 to 66% in Q1 FY2026 and 74% in Q2 FY2026 [data_package Section 5, CMBU Q4-Q2 rows].

Product-level economics are less directly disclosed. Micron does not disclose annual HBM revenue dollars, server DIMM revenue dollars, or hyperscale-specific conventional DRAM revenue. The data package states that HBM is material to CMBU and data-center growth, but no annual dollar series was fetched or disclosed [data_package Segment-to-product guardrails, HBM row; Section 4, CMBU / data center HBM row]. The finest regular dollar-disclosed product view is Micron-wide technology revenue: DRAM, NAND, and Other primarily NOR [data_package Section 4, technology revenue table]. That technology table is useful for knowing the whole company's DRAM/NAND mix, but it cannot be mapped one-to-one to CMBU. Therefore all CMBU product-level starting splits in the forecast section are model assumptions, not historical disclosures. They are included only so the FY+5 segment rollup is transparent; they are flagged as a data gap and should not be treated as management-disclosed history.

Capital intensity is structurally high. At the consolidated company level, capex was $15.86B in FY2025, or 42.4% of revenue, and management later raised FY2026 capex expectation above $25B while saying FY2027 construction-related capex is expected to increase by more than $10B year over year [data_package Section 7, FY2025 capex row; Section 9, 2026-03-18 capex action]. CMBU itself does not disclose segment capex, but its HBM and leading server-memory mix likely consumes a disproportionate share of the incremental manufacturing, advanced packaging, and technology-node investment. That supports high gross margins when supply is tight, but it also raises downside risk if customers slow orders after Micron has committed capacity.

3. Unit economics

CMBU revenue turns into profit through three levers: bit growth, mix, and utilization. Bit growth matters because memory manufacturing has large fixed costs. When wafer starts, test, and backend assets run full, depreciation and overhead are spread over more saleable output. Mix matters because HBM and leading-edge cloud memory carry much higher value per bit than mature commodity products. Utilization matters because memory companies suffer severe margin compression in downturns: low fab loadings, inventory write-downs, and price declines can overwhelm cost reductions.

The FY2023-FY2025 history shows that operating leverage is extreme. In FY2023, CMBU revenue was $1.87B and operating margin was negative 41.0%. In FY2024, revenue doubled to $3.79B and margin improved to 6.4%. In FY2025, revenue increased to $13.52B and margin reached 45.3% [data_package Section 3, CMBU Revenue and Operating margin rows]. TTM margin then reached 56.1% as Q1 and Q2 FY2026 added much higher-revenue quarters to the trailing period [quant_foundation P4, CMBU row]. This is the signature of a memory upcycle amplified by richer data-center mix: a large portion of operating cost is fixed or semi-fixed, while higher ASPs and richer product mix flow through quickly.

HBM likely has the best unit economics in the segment, but also the toughest capacity economics. It uses more wafer area and more complex packaging than commodity DRAM, and it requires tight integration with accelerator platforms. A supplier that is qualified and sold out can price for scarcity, yield risk, and strategic value. The data package records HBM revenue nearly +50% sequential in Q3 FY2025, completed calendar 2026 volume and pricing in Q1 FY2026, and HBM4 volume shipments beginning in Q2 FY2026 [data_package Section 4, CMBU / data center HBM row; Section 9, 2026-03-18 HBM4 action]. Those facts support premium margins through at least the near-term customer commitment window.

The margin risk is that HBM's premium can normalize. If Samsung, SK hynix, and Micron all add qualified HBM capacity at the same time, pricing power may migrate back to customers. If accelerator demand pauses, customers can push out orders or demand price concessions. If yields disappoint, the gross margin benefit of HBM can be offset by scrap, rework, and

underabsorbed advanced packaging costs. Finally, depreciation from high capex can show up just as the cycle softens. That is why this appendix does not assume current 56% TTM operating margin automatically expands. The base case carries CMBU to 54.0% FY+5 operating margin, below current TTM, even though revenue compounds strongly. The bear case takes margin to 45.8%, close to FY2025's 45.3% but far below the TTM peak. The bull case lifts margin to 60.6% only if HBM scarcity and cloud contract discipline persist longer than usual.

The conventional hyperscale cloud memory line has lower margin than HBM but can still be attractive. Hyperscalers value supply assurance, module density, power efficiency, and validated roadmaps. The weakness is substitutability: if several suppliers meet the required spec, price competition returns quickly. CMBU's non-HBM hyperscale line should therefore earn above-corporate through cycle when supply is tight, but it is less protected than HBM-specific platform wins. Operating expenses include R&D for new nodes, HBM generations, validation, and customer engineering; SG&A is low relative to revenue because the customer base is concentrated and direct. In FY2025, CMBU had $13.524B revenue, $5.867B COGS, $1.315B R&D, and $0.213B SG&A [quant_foundation P2, CMBU row]. R&D was about 9.7% of revenue and SG&A only about 1.6%, so gross margin and manufacturing execution dominate segment profit.

4. Competitive dynamics

CMBU competes primarily with SK hynix and Samsung in high-end DRAM and HBM. Kioxia, Western Digital, YMTC, and other NAND players matter for Micron as a whole, but they are less central to CMBU because CMBU is cloud memory and HBM, not data-center storage. The data package explicitly warns that NAND and data-center SSD momentum belong primarily to CDBU rather than CMBU [data_package Segment-to-product guardrails, CDBU, NAND, and Data center SSD rows]. For this appendix, the competitive set is therefore high-performance memory suppliers competing for hyperscale server memory sockets and HBM positions on AI accelerator roadmaps.

The market structure is oligopolistic, which helps but does not eliminate cyclicality. Three suppliers dominate high-volume DRAM. That concentration supports more rational supply discipline than in fragmented commodity markets, and Micron's Investor Day framework emphasized "supply in-line with demand" as a structural industry objective [data_package Section 6, Investor Day / industry discipline row]. However, oligopoly does not equal permanent pricing power. The same three suppliers can all overbuild if AI demand appears insatiable. Memory industry profitability has historically swung because capacity decisions are made years before demand is known. The current AI cycle is unusual in magnitude, but the underlying capital-cycle risk remains.

HBM competition is more capability-specific than conventional DRAM competition. Winning requires technology leadership, packaging capacity, thermal and power performance, close platform qualification with GPU or accelerator vendors, and the ability to deliver at scale. Management disclosed that Micron began volume shipment of HBM4 36GB 12-Hi in 2026 for NVIDIA Vera Rubin and sampled HBM4 16-Hi [data_package Section 9, 2026-03-18 HBM4 action]. That is a meaningful competitive signal because it ties the product roadmap to a named next-generation accelerator platform. The caveat is that platform presence does not by itself disclose revenue share, price, or margin. It means Micron is relevant and qualified; it does not mean Micron owns the whole socket.

Hyperscale customers have countervailing power. Large cloud customers can commit multi-year demand, but they can also multi-source, redesign future platforms, and use their scale to pressure price once supply is no longer tight. In conventional server DRAM, switching costs are lower than in HBM because standards and module form factors are more common. In HBM, switching is harder near a platform generation, but still possible across generations. That creates a time-dependent moat: strong during an active qualified ramp; weaker when the next platform architecture is still being designed.

Substitution risk is not zero. AI architectures can reduce memory intensity through model compression, sparsity, more efficient inference, software-level caching, custom memory hierarchy, or alternative packaging. But those changes generally reduce the rate of content growth rather than remove the need for high-bandwidth memory. The bigger substitution risk for CMBU over five years is not "no memory," but a customer mix shift toward architectures where a competitor has the preferred HBM part or where custom accelerators lower the memory bill per unit of compute. This is captured in the bear case through slower HBM CAGR and lower terminal margin.

5. Moat at the segment level

CMBU has a real but cyclical moat. The defensible parts are qualification depth, process technology, manufacturing scale, customer trust, and HBM roadmap execution. A cloud customer deploying thousands of accelerator racks cannot tolerate memory failures, supply uncertainty, or late qualification. That creates a barrier to fringe entrants. The segment's customer base is concentrated, but the product stakes are high enough that approved suppliers with proven reliability have an

advantage.

The strongest moat is in HBM platform qualification. Once a memory supplier is designed into a GPU or accelerator platform, the customer has limited ability to switch within that platform's volume ramp without engineering risk. Micron's HBM4 shipment and sampling disclosures for NVIDIA Vera Rubin suggest it is competing in the right design windows [data_package Section 9, 2026-03-18 HBM4 action]. The "sold out" commentary for calendar 2026 volume and pricing suggests that near-term supply is committed and demand exceeds available capacity [data_package Section 6, CMBU / HBM Q1 FY2026 row]. That is a moat-like condition for the current generation.

The weaker part is that the moat resets each generation. HBM3E, HBM4, HBM4E, and later products create new qualification races. A supplier can gain or lose share if its power, bandwidth, stack height, yield, packaging availability, or timing is inferior. Unlike software, there is no near-zero marginal cost lock-in. CMBU's moat must be re-earned with capex and execution. That makes the segment more durable than commodity PC DRAM, but less durable than a software platform with high switching costs and low reinvestment.

Over five to ten years, the moat should protect participation and support better-than-corporate margins, but not guarantee today's peak margins. The base case assumes Micron remains a credible top-three HBM and hyperscale-memory supplier, participates in the AI memory expansion, and retains premium economics, but sees some normalization as capacity catches up and depreciation rises. The bear case assumes the moat is mostly cyclical: Micron keeps share but pricing falls and margins revert closer to FY2025. The bull case assumes HBM supply remains structurally scarce, Micron keeps roadmap parity or leadership, and hyperscale customers continue treating memory as a strategic input rather than a commodity.

6. Historical growth rates - reproduced from data package

The historical table below uses only current-taxonomy CMBU segment figures for FY2023-FY2025. It does not use FY2021-FY2022 CNBU because the data package identifies a hard taxonomy break [data_package Section 1, taxonomy paragraph; Section 10, current segment history gap]. No HBM dollar series is disclosed, so HBM is shown as a KPI row rather than a dollar row [data_package Section 4, CMBU / data center HBM row].

Product / sub-segment	FY2023 rev	FY2024 rev	FY2025 rev	3-yr CAGR / current-taxonomy growth	Most recent YoY	Data package cite
CMBU reportable segment total	$1.87B	$3.79B	$13.52B	168.9% two-year CAGR, because only FY2023-FY2025 current taxonomy exists	256.6% in FY2025	data_package Section 3, CMBU Revenue and YoY rows
HBM within CMBU / data center	n/d	n/d	n/d	n/d - no dollar series disclosed	Q3 FY2025 HBM revenue nearly +50% sequential; CY2026 volume/pricing agreed; HBM4 volume shipments began in Q2 FY2026	data_package Section 4, CMBU / data center HBM row
DRAM technology, company-wide context only	$10.98B	$17.60B	$28.58B	61.3% two-year CAGR	Q2 FY2026 DRAM +207% YoY	data_package Section 4, DRAM row; Section 5, Q2 FY2026 DRAM row

Internal arithmetic check: CMBU FY2024 revenue tie-out is $1.87B x (1 + 102.6%) = $3.79B, within rounding. CMBU FY2025 revenue tie-out is $3.79B x (1 + 256.6%) = $13.52B, within rounding. No HBM back-solve is performed because there is no disclosed FY-1 HBM base suitable for a labeled back-solve [data_package Section 4, Back-solved product dollars note]. The DRAM technology row is included only to show the broader product context; it is not used as CMBU revenue because DRAM crosses multiple segments [data_package Segment-to-product guardrails, DRAM row].

Recent quarterly CMBU bridge:

Quarter	CMBU revenue	Segment margin / disclosure	Source and modeling treatment
Q3 FY2025	$3.43B	n/d	data_package Section 5, derived current-taxonomy row; approximate bridge only
Q4 FY2025	$4.50B	CMBU gross margin 59%	data_package Section 5, Q4 FY2025 row
Q1 FY2026	$5.30B	CMBU gross margin 66%	data_package Section 5, Q1 FY2026 row

Quarter	CMBU revenue	Segment margin / disclosure	Source and modeling treatment
Q2 FY2026	$7.70B	CMBU gross margin 74%	data_package Section 5, Q2 FY2026 row
TTM ending Feb. 26, 2026	$20.962B	operating margin 56.1%	quant_foundation P4, CMBU row

7. Management guidance - quoted from data package Section 6

The following guidance items are reproduced from the data package, not independently re-fetched from transcripts. They are intentionally short because the data package captured only short excerpts for copyright discipline.

Segment / topic	Data package row	Verbatim excerpt	Interpretation for CMBU
CMBU / HBM / cloud memory	Section 6, Q2 FY2026 call, Sanjay Mehrotra	"strategic asset"	Memory is being purchased as a strategic AI bottleneck, not merely as a commodity input. This supports premium pricing and supply commitments while AI clusters remain constrained by memory bandwidth and capacity.
CMBU / HBM	Section 6, Q1 FY2026 call, Sanjay Mehrotra	"sold out"	Calendar 2026 HBM is allocation-constrained. The base case assumes strong near-term growth but deceleration after the committed period as capacity additions arrive.
CMBU / HBM	Section 6, Q1 FY2026 call, Sanjay Mehrotra	"around $100 billion in 2028"	Management's HBM TAM framing supports a large market opportunity. The model does not convert this directly into Micron revenue share because no CMBU HBM dollar base is disclosed.
CMBU / server DRAM	Section 6, Q2 FY2026 call, Sanjay Mehrotra	"low-teens percentage range"	Server units are expected to grow in CY2026; memory content per server likely compounds unit growth. This anchors the conventional hyperscale-memory base-case growth above mature GDP-like growth.
Corporate supply	Section 6, Q1 FY2026 call, Sanjay Mehrotra	"beyond calendar 2026"	Tight DRAM/NAND supply beyond CY2026 supports elevated CMBU margins, but the model still normalizes margins by FY+5 because capex and competitor supply can catch up.
Corporate capital intensity	Section 6, Q2 FY2026 call, Sanjay Mehrotra	"above $25 billion"	Elevated capex is required to support data-center demand. It is a growth enabler and a future depreciation risk.
Investor Day / industry discipline	Section 6, Investor Day 2022 presentation	"supply in-line with demand"	Industry discipline is part of the margin thesis, but the bear case assumes the discipline weakens or arrives late relative to capacity additions.

8. Forward growth assumptions - explicit by modeling line

Product-level CMBU dollars are not disclosed. To build a reconstructable segment rollup, this appendix uses three forecast lines that sum to the quant-foundation TTM CMBU revenue of $20.962B [quant_foundation P4, CMBU row]. The starting allocation is a modeling assumption, not a historical disclosure: base case uses $10.8B non-HBM hyperscale cloud memory, $8.8B HBM, and $1.362B other/residual CMBU support. [DATA GAP: Micron does not disclose HBM or conventional hyperscale cloud memory revenue as separate dollar series; forecast starting splits are analyst assumptions, not company-reported history.]

Base case:

Product / modeling line	TTM starting revenue	Historical anchor	Latest YoY / status	Mgmt FY+1 guide	Base CAGR TTM to TTM+5y	TTM+5y revenue	Justification
Non-HBM hyperscale cloud memory	$10.800B	CMBU total FY2023-FY2025 two-year CAGR 168.9% [data_package Section 3, CMBU rows]	Q2 FY2026 CMBU revenue $7.70B and 74% gross margin [data_package Section 5, Q2 CMBU row]	Server units expected in the "low-teens percentage range" [data_package Section 6, CMBU / server DRAM row]	15.0%	$21.723B	Growth decelerates from the current spike because FY2025/TTM include an upcycle recovery, but hyperscale AI servers still add memory content and units. A 15% CAGR is above mature server unit growth because content per server rises.
HBM for data-center customers	$8.800B	No disclosed dollar history; CMBU total is the only dollar anchor [data_package Section 4, HBM row]	HBM nearly +50% sequential in Q3 FY2025; CY2026 volume/pricing agreed; HBM4 volume shipments began [data_package Section 4 and Section 9]	"sold out" and TAM "around $100 billion in 2028" [data_package Section 6, HBM rows]	28.0%	$30.237B	HBM remains the main mix driver. The 28% CAGR is far below recent explosive growth, reflecting capacity normalization after CY2026, but still high because AI accelerator generations remain memory-bandwidth constrained.
Other / residual CMBU support	$1.362B	No separate disclosure; balancing line to CMBU TTM [quant_foundation P4]	n/d	n/d	6.0%	$1.823B	Residual services, qualification, and smaller cloud-memory lines grow modestly. This line prevents the model from pretending every dollar is HBM or mainline server DRAM.
CMBU total	$20.962B	TTM CMBU from quant foundation [quant_foundation P4]	TTM OI margin 56.1% [quant_foundation P4]	n/a	20.8% implied	$53.782B	Sum of lines. Arithmetic: $21.723B + $30.237B + $1.823B = $53.782B.

Base deceleration path: CMBU total revenue grows from $20.962B TTM to $53.782B at the February 26, 2031 horizon. That implies 20.8% CAGR over exactly five calendar years. Year-by-year total revenue path is approximately $27.1B, $33.8B, $40.4B, $47.1B, and $53.8B. This is much slower than FY2025's 256.6% CMBU growth and slower than the current TTM run-rate acceleration, because the starting point already includes Q1/Q2 FY2026 upcycle strength. The thesis is not that CMBU keeps tripling; it is that a large HBM mix shift and server content growth keep the segment compounding above semiconductor GDP for five years.

Bull case:

Product / modeling line	TTM starting revenue	Historical anchor	Latest YoY / status	Mgmt FY+1 guide	Bull CAGR TTM to TTM+5y	TTM+5y revenue	What changes versus base
Non-HBM hyperscale cloud memory	$10.400B	CMBU current-taxonomy history [data_package Section 3]	Q2 FY2026 CMBU $7.70B [data_package Section 5]	Low-teens server units [data_package Section 6]	19.0%	$24.818B	Hyperscale server content rises faster because AI inference broadens across cloud fleets, and non-HBM server DRAM remains tight rather than commoditizing quickly.
HBM for data-center customers	$9.200B	No disclosed HBM dollar history [data_package Section 4]	HBM4 shipment and sampling milestones [data_package Section 9]	Sold out CY2026; $100B TAM timing [data_package Section 6]	38.0%	$46.045B	Micron gains or holds premium HBM share through HBM4/HBM4E, capacity remains scarce, and accelerator demand continues to outstrip memory supply.
Other / residual CMBU support	$1.362B	Balancing line [quant_foundation P4]	n/d	n/d	8.0%	$2.001B	Residual cloud-memory revenue grows with the broader installed base.

Product / modeling line	TTM starting revenue	Historical anchor	Latest YoY / status	Mgmt FY+1 guide	Bull CAGR TTM to TTM+5y	TTM+5y revenue	What changes versus base
CMBU total	$20.962B	TTM CMBU [quant_foundation P4]	n/a	n/a	28.3% implied	$72.864B	Sum of lines. Arithmetic: $24.818B + $46.045B + $2.001B = $72.864B.

Bear case:

Product / modeling line	TTM starting revenue	Historical anchor	Latest YoY / status	Mgmt FY+1 guide	Bear CAGR TTM to TTM+5y	TTM+5y revenue	What changes versus base
Non-HBM hyperscale cloud memory	$11.000B	CMBU current-taxonomy history [data_package Section 3]	Q2 FY2026 CMBU $7.70B [data_package Section 5]	Low-teens server units [data_package Section 6]	11.0%	$18.536B	Server memory still grows, but customers multi-source aggressively and conventional cloud DRAM returns closer to normal contract pricing by FY+5.
HBM for data-center customers	$8.400B	No disclosed HBM dollar history [data_package Section 4]	HBM tight through CY2026 [data_package Section 6]	Sold out CY2026 [data_package Section 6]	18.0%	$19.217B	HBM grows but sharply decelerates as Samsung/SK hynix/Micron supply additions catch up, customers redesign for cost, or Micron loses share on one major platform generation.
Other / residual CMBU support	$1.562B	Balancing line [quant_foundation P4]	n/d	n/d	4.0%	$1.900B	Residual activity grows slowly and does not offset HBM normalization.
CMBU total	$20.962B	TTM CMBU [quant_foundation P4]	n/a	n/a	13.6% implied	$39.653B	Sum of lines. Arithmetic: $18.536B + $19.217B + $1.900B = $39.653B.

The case spread is intentionally wide. CMBU is a memory-cycle segment at the center of the AI buildout, not a steady subscription business. The bear case still grows because even normalized AI infrastructure needs more memory; the downside is margin and deceleration, not a collapse to FY2023. The bull case is not "current growth forever"; it is a five-year HBM scarcity case where Micron keeps roadmap relevance and capacity is absorbed quickly. The base case is between those: strong HBM compounding, slower conventional server-memory growth, and no hidden use of undisclosed product dollars.

9. Forward operating margin assumptions

The current TTM segment operating margin is 56.1% [quant_foundation P4, CMBU row]. FY2025 operating margin was 45.3%, and FY2023-FY2024 were much lower [data_package Section 3, CMBU Operating margin row]. Q4 FY2025 through Q2 FY2026 disclosed CMBU gross margins of 59%, 66%, and 74%, which explains the high TTM operating margin but does not guarantee permanence [data_package Section 5, CMBU quarterly rows]. The main margin mechanisms are HBM mix, pricing discipline, utilization, yields, and depreciation from the capex ramp.

Base case margin table:

Product / modeling line	TTM+5y revenue	Terminal OI margin	TTM+5y OI	Margin mechanism
Non-HBM hyperscale cloud memory	$21.723B	50.0%	$10.861B	Below current CMBU TTM margin because conventional server DRAM faces more multi-sourcing and contract-price normalization, but above average memory-cycle levels due cloud qualification and density mix.
HBM for data-center customers	$30.237B	58.0%	$17.537B	HBM remains premium, but margin is below current Q2-like peak because depreciation, yield learning, and capacity competition offset scale.

Product / modeling line	TTM+5y revenue	Terminal OI margin	TTM+5y OI	Margin mechanism
Other / residual CMBU support	$1.823B	35.0%	$0.638B	Smaller residual activities have less scarcity pricing and less operating leverage.
CMBU total	$53.782B	54.0%	$29.036B	Revenue-weighted average. Arithmetic: $29.036B / $53.782B = 54.0%.

Bull case margin table:

Product / modeling line	TTM+5y revenue	Terminal OI margin	TTM+5y OI	Margin mechanism
Non-HBM hyperscale cloud memory	$24.818B	56.0%	$13.898B	Tight cloud memory markets persist and hyperscale customers pay for supply assurance, density, and power efficiency.
HBM for data-center customers	$46.045B	64.0%	$29.469B	HBM scarcity persists across platform generations; Micron keeps qualified positions and converts scale into high operating leverage.
Other / residual CMBU support	$2.001B	40.0%	$0.800B	Residual revenue benefits from the same cloud cycle and fixed-cost absorption.
CMBU total	$72.864B	60.6%	$44.167B	Revenue-weighted average. Arithmetic: $44.167B / $72.864B = 60.6%.

Bear case margin table:

Product / modeling line	TTM+5y revenue	Terminal OI margin	TTM+5y OI	Margin mechanism
Non-HBM hyperscale cloud memory	$18.536B	43.0%	$7.970B	Conventional server memory normalizes toward cyclical DRAM economics as supply catches up and customers regain leverage.
HBM for data-center customers	$19.217B	50.0%	$9.609B	HBM remains better than commodity DRAM but no longer has extreme scarcity pricing; higher depreciation and lower yields pressure margins.
Other / residual CMBU support	$1.900B	30.0%	$0.570B	Residual revenue absorbs less fixed cost and carries lower pricing power.
CMBU total	$39.653B	45.8%	$18.149B	Revenue-weighted average. Arithmetic: $18.149B / $39.653B = 45.8%.

Any terminal margin more than 100 bps away from the current 56.1% TTM margin needs explanation. Base is 210 bps lower because current TTM includes exceptional pricing and utilization, while FY+5 includes more depreciation and competitor capacity. Bear is 1,030 bps lower because it assumes both HBM pricing normalization and weaker conventional DRAM pricing. Bull is 450 bps higher because it assumes HBM remains structurally scarce and cloud memory customers continue valuing guaranteed supply over price minimization.

10. Segment rollup - bottoms-up arithmetic

The segment rollup is reconstructed from the product/modeling lines in Sections 8 and 9. All starting revenue lines sum to $20.962B, the quant-foundation TTM CMBU revenue [quant_foundation P4, CMBU row]. All terminal revenue and OI numbers below are the direct output of the scenario CAGRs and product-level margin assumptions above.

Case	Non-HBM hyperscale cloud memory rev	HBM rev	Other / residual rev	Segment TTM+5y revenue	Segment TTM+5y op margin	Segment TTM+5y op income	Probability
Bear	$18.536B	$19.217B	$1.900B	$39.653B	45.8%	$18.149B	25%

Case	Non-HBM hyperscale cloud memory rev	HBM rev	Other / residual rev	Segment TTM+5y revenue	Segment TTM+5y op margin	Segment TTM+5y op income	Probability
Base	$21.723B	$30.237B	$1.823B	$53.782B	54.0%	$29.036B	50%
Bull	$24.818B	$46.045B	$2.001B	$72.864B	60.6%	$44.167B	25%

Arithmetic checks: base revenue sums exactly to $53.782B before rounding, and base OI sums to $29.036B. Bear revenue sums to $39.653B and OI to $18.149B. Bull revenue sums to $72.864B and OI to $44.167B. The product-level rollups reconcile to segment totals within rounding. Probability-weighted FY+5 CMBU revenue is $55.020B, and probability-weighted operating income is $30.097B, but the main ER2 model should use explicit scenario cases rather than probability-weighted blending unless instructed by the orchestrator.

The key interpretation is that CMBU does not need FY2025-style hypergrowth to be extremely valuable. Even the bear case roughly doubles TTM revenue over five years because the TTM base is still early in the AI memory ramp. The major question is whether CMBU earns 45%-plus operating margins at that scale or whether memory pricing normalizes harder. The base case answer is that CMBU can hold a mid-50s operating margin because HBM becomes a larger share of revenue even as conventional cloud memory normalizes.

11. Key risks and wildcards

Bear risk - capacity overshoot: Micron, SK hynix, and Samsung can all read the same AI demand signals and add too much capacity. If HBM and advanced DRAM capacity arrives faster than accelerator deployments, pricing can normalize abruptly. This is the most important bear-case risk because it compresses both revenue growth and margin.

Bear risk - platform share loss: Micron's HBM roadmap may be qualified today, but future accelerator generations reopen the competition. Losing a major GPU or hyperscale platform would reduce HBM CAGR below the base case and could leave capacity underutilized.

Bear risk - depreciation and yield drag: FY2026 capex above $25B and rising FY2027 construction-related capex are growth enablers, but they also create future fixed-cost absorption pressure [data_package Section 9, capex action]. If yields lag or demand pauses, operating margin can fall even if revenue remains high.

Bear/base risk - customer concentration: Large hyperscale customers can negotiate aggressively, multi-source, or shift architectures. The more concentrated the demand, the more each customer decision matters. This risk is partly offset by the technical cost of switching within active platform generations.

Base wildcard - inference memory intensity: If inference workloads become more memory-intensive as context windows grow and agentic workloads scale, conventional cloud DRAM and HBM can grow faster than server unit volumes. This is the primary reason the base case keeps CMBU total CAGR above 20%.

Bull wildcard - sustained HBM scarcity: If HBM remains sold out beyond CY2026 and the HBM TAM reaches management's $100B timing with Micron holding strong share, HBM revenue can dominate CMBU by FY+5 [data_package Section 6, HBM TAM row]. That is the bull-case engine.

Bear wildcard - architectural efficiency: Better model efficiency, memory compression, caching, or custom accelerators can reduce memory dollars per unit of compute. This does not eliminate memory demand, but it can slow content growth enough to push the model toward the bear case.

Data-quality risk - undisclosed product split: The largest modeling uncertainty is not the reported segment total; the quant foundation ties CMBU TTM to official sources. The uncertainty is product mix. [DATA GAP: Micron does not disclose HBM, conventional hyperscale cloud memory, or residual CMBU dollar revenue separately.] The forecast therefore makes explicit product-level assumptions rather than pretending the data package contains undisclosed HBM dollars.

Summary table

Case	Segment TTM+5y Revenue	Segment TTM+5y Op Margin	Segment TTM+5y Op Income	Probability
Bear	$39.653B	45.8%	$18.149B	25%
Base	$53.782B	54.0%	$29.036B	50%
Bull	$72.864B	60.6%	$44.167B	25%

Source and data flags

- Historical CMBU segment dollars are sourced from data_package Section 3 and quant_foundation P4 only; no historical Micron dollar figure was re-derived in this appendix.
- B-owned live/source files fetched for provenance: raw/B-CMBU-SEC-10K-FY2025-mu-20250828.htm, raw/B-CMBU-SEC-10Q-FQ2-2026-mu-20260226.htm, raw/B-CMBU-Micron-IR-FQ2-2026-release.html, and raw/B-CMBU-Micron-IR-FQ4-2025-release.html.
- [DATA GAP: Micron does not disclose HBM annual revenue dollars, conventional hyperscale cloud memory dollars, or residual CMBU product dollars.]
- [DATA GAP: Q3 FY2025 standalone current-taxonomy CMBU revenue is derived in the data package, not separately released.]
- [DATA GAP: HBM product margins are not disclosed; product-level terminal margins are model assumptions calibrated to disclosed segment operating margin and quarterly gross-margin direction.]

Appendix B2 - MCBU

Mobile and Client Business Unit (MCBU) - Segment Deep Dive

Stage 0 anchor: Today is 2026-04-29. Micron uses a 52/53-week fiscal year ending on the Thursday closest to August 31. The latest reported quarter is Q2 FY2026, ended February 26, 2026. TTM equals Q3 FY2025 + Q4 FY2025 + Q1 FY2026 + Q2 FY2026, ending February 26, 2026. The forward horizon used throughout this appendix is February 26, 2031, exactly five calendar years after the TTM end date.

Source discipline: Micron's own historical dollar figures and management commentary are taken from `data_package.md` and `quant_foundation.md`, not re-derived in this appendix. Live B-MCBU support pulls were saved under `raw/B-MCBU-*` from SEC EDGAR, Micron IR, and the FMP stable helper only. One mistyped SEC accession URL was retried once and failed with HTTP 404; the correct filing path was then located through SEC's live submissions feed and fetched. That failure is a source-control flag, not a financial-data gap.

0. Segment Boundary And Taxonomy Note

MCBU is Micron's Mobile and Client Business Unit. Under the current taxonomy, it is focused on memory and storage solutions for the mobile and client segments. The boundary is not stable across the full five-year history. Micron reorganized into CMBU, CDBU, MCBU, and AEBU effective in Q4 FY2025, and the FY2025 Form 10-K retrospectively adjusted FY2023-FY2025 to the new market-segment structure. Therefore, FY2023-FY2025 are comparable for current-segment history, while FY2021-FY2022 remain legacy business-unit history and are not spliced into MCBU growth. The data package is explicit on this boundary: current taxonomy begins with restated FY2023 through FY2025, and legacy CNBU/MBU/EBU/SBU figures are preserved only for context [data_package section 1, lines 63-75; section 3, lines 110-160].

That taxonomy break matters more for MCBU than for a simple product line because mobile and client markets contain multiple technology products. DRAM and NAND are not one-to-one segment proxies. DRAM crosses data center, client PC, graphics, industrial, mobile, and automotive markets; NAND crosses data center SSD, client PC, consumer, automotive, and mobile managed NAND [quant_foundation P-Taxonomy, lines 100-109]. The reportable segment is the correct modeling unit. Product color can explain why revenue and margin move, but the appendix should not allocate companywide DRAM or NAND dollars into MCBU without disclosure.

1. What This Segment Actually Is

MCBU sells memory and storage into two broad end markets: client computing and mobile devices. The client side includes PC original equipment manufacturers, workstation vendors, and ecosystem partners that need DDR, LPDDR, client SSD, and related modules. The mobile side includes smartphone OEMs and mobile ecosystem partners that need LPDDR, managed NAND, and other compact, low-power memory and storage products. The segment is not simply "consumer electronics." It is the part of Micron that sits between the data-center cycle and the edge-device cycle, with revenue driven by end-device units, memory content per device, memory prices, customer allocation, and product qualification timing.

The customer problem is direct. PC and smartphone OEMs need enough memory to ship differentiated devices, but the amount of memory required for local AI has moved up. In PCs, agentic workloads and personal AI workstations increase DRAM configurations; management highlighted recommended AI PC memory configurations of "at least 32GB" in the data package's Q2 FY2026 commentary row [data_package section 6, line 240]. In smartphones, flagship devices increasingly ship with 12GB or more DRAM; the data package captured management's "nearly 80%" flagship mix indicator for Q4 calendar 2025 [data_package section 6, line 241]. These are not segment revenue disclosures, but they are useful demand signals because MCBU revenue can grow even when units are flat or down if content and pricing rise enough.

Pricing is cyclical and commodity-linked. Micron does not sell a pure software subscription or an installed-base maintenance stream in MCBU. It sells semiconductor components into OEM supply chains. That means revenue is the product of bits, price per bit, mix, and allocation. During downcycles, PC and smartphone customers can delay orders, draw down inventory, or trade down product mix. During tight cycles, Micron can push price and mix upward, but customers can also face demand destruction if memory becomes too large a share of device bill of materials. The Q2 FY2026 call captured both sides: management said PC and smartphone units could decline in the low double-digit percentage range in calendar 2026 because of supply constraints, while also arguing that on-device AI drives memory content growth [data_package section 4, line 210; section 6, lines 239-241].

Go-to-market is qualification-led. PC OEMs and mobile OEMs qualify new DRAM, LPDDR, and SSD products before broad volume deployment. Management noted PC qualifications for LPCAM2 at a major OEM, client SSD launches, LPDDR5X design-ins for AI workstations, and LPDDR6 sampling for smartphones in the Q2 FY2026 live transcript pull, while the data package preserves the core PC and smartphone content points. These qualifications give Micron a path to sustain share in premium configurations, but they do not eliminate cycle risk. If a customer reduces unit builds or reprioritizes scarce memory toward higher-end SKUs, Micron's realized revenue can still swing sharply.

2. Current Economics

The current MCBU economics are extraordinary and should not be normalized without care. On the annual restated current taxonomy, MCBU revenue was $7.39B in FY2023, $11.67B in FY2024, and $11.86B in FY2025. Operating income moved from a $3.19B loss in FY2023 to roughly breakeven in FY2024 and $1.98B in FY2025, or 16.7% operating margin [data_package section 3, lines 128-134]. That annual history shows the normal Micron pattern: when pricing and utilization collapse, segment earnings can be deeply negative; when pricing recovers, a large amount of incremental revenue falls through to profit.

TTM is a different picture because the last four quarters include the sharp FY2026 pricing and mix surge. Quant foundation P4 builds TTM MCBU from FY2025 annual segment revenue, less FY2025 H1 segment revenue, plus FY2026 H1 segment revenue. The result is $18.981B of TTM revenue and $9.439B of TTM operating income, a 49.7% operating margin [quant_foundation P4, lines 142-149]. The FY2026 Q2 10-Q segment table reported exact MCBU quarterly revenue of $7.711B and operating income of $5.836B, or a 75.7% operating margin, while the Q2 call/release rounded MCBU revenue to $7.70B and gross margin to 79%. The data package's quarterly trend table captures the rounded revenue sequence: $3.22B in Q3 FY2025, $3.80B in Q4 FY2025, $4.30B in Q1 FY2026, and $7.70B in Q2 FY2026 [data_package section 5, lines 223-228; raw/B-MCBU-SEC-10Q-FQ2-2026-mu-20260226.htm Segment and Other Information].

The key sub-products are disclosed qualitatively, not as dollar series. Micron's finest regularly dollar-disclosed product view is companywide DRAM, NAND, and Other/NOR, not MCBU by product. The data package states that client SSD, mobile DRAM, PC, and smartphone product revenues are not separately disclosed in full historical dollar series [data_package section 4, lines 197-212]. That creates a modeling constraint. The appendix can discuss PC/client and mobile as subdrivers, but the only dollar-disclosed MCBU product line is the reportable segment total. [DATA GAP: Micron does not disclose MCBU revenue split between PC/client memory, client SSD, mobile DRAM, managed NAND, or smartphone customer revenue.]

Capital intensity is borne at the company level, not assigned by segment. MCBU consumes the same manufacturing platform as other DRAM and NAND businesses, so marginal segment returns depend on allocation of scarce wafer starts and mix. In FY2026, management's companywide capex outlook moved above $25B, and FY2027 construction capex is expected to step up meaningfully [data_package section 6, line 246]. MCBU benefits from supply tightness when data center and AI demand absorb industry capacity, but it can also be squeezed if the highest-return wafers are allocated to HBM, server DRAM, or data center SSD.

3. Unit Economics

MCBU unit economics are a classic memory-cycle operating lever. Revenue begins with end-device units, but profit begins with the gap between average selling price and wafer cost. Manufacturing costs are largely driven by node yield, depreciation, process complexity, utilization, and mix. When utilization is low and pricing is weak, fixed manufacturing costs crush gross margin. When utilization is high and prices move faster than cost, margin expands sharply. The FY2023-FY2026 MCBU history shows that operating leverage in plain form: FY2023 revenue of $7.39B produced a $3.19B operating loss, while TTM revenue of $18.981B produced $9.439B of operating income [data_package section 3, lines 128-134; quant_foundation P4, lines 142-149].

The reason profit can swing so much is that Micron does not need a proportional increase in segment opex to support every dollar of pricing. R&D and SG&A matter, especially because client SSDs and LPDDR roadmaps need qualification and product engineering, but the decisive margin driver is pricing versus cost. The data package and Q2 IR release point to higher pricing and favorable mix as the drivers of the sharp FY2026 margin improvement. In Q2 FY2026, MCBU revenue was up 81% sequentially, while the live IR release attributed the move to higher pricing partially offset by lower bit shipments; gross margin rose to 79%, and the FY2026 Q2 10-Q segment table shows $5.836B of MCBU operating income on $7.711B of revenue, or a 75.7% operating margin. This is not sustainable through a full normalized cycle, but it is evidence that MCBU can generate very high earnings when industry supply is short.

The product mix has two competing effects. AI PC and flagship smartphone content growth can improve mix because higher-capacity LPDDR, DDR5, LPCAMM/LPCAM2, and premium SSD configurations carry more value per device than low-end memory attach. At the same time, consumer devices are more price-sensitive than hyperscale AI infrastructure. If memory prices rise too much, OEMs can change configurations, delay purchases, narrow high-end model mix, or pass cost through to end users and lose volume. Management acknowledged this elasticity risk in the Q2 FY2026 transcript pull, and the data package preserved the unit caution: PC and smartphone units may decline low double digits in calendar 2026 because of supply constraints [data_package section 4, line 210].

The segment therefore earns best when three conditions overlap: memory supply is tight, OEMs need premium memory content for AI features, and Micron's product qualifications let it hold share in high-value configurations. It earns worst when device units are weak, customers have inventory, and memory content growth is insufficient to offset ASP pressure. Unlike CMBU, MCBU is not protected by HBM scarcity or AI accelerator roadmaps. Unlike AEBU, it does not have the same long automotive qualification tail. It sits in the middle: better secular content growth than old PC memory, but still exposed to consumer electronics cyclicality.

4. Competitive Dynamics

MCBU competes mainly against the large global memory suppliers in DRAM and NAND. In DRAM and LPDDR, the competitive set includes Samsung Electronics and SK hynix. In NAND and client SSDs, competition includes Samsung, SK hynix/Solidigm, Kioxia/Western Digital, and other NAND suppliers. The segment also faces indirect competition from OEM configuration choices. A PC maker can choose 16GB versus 32GB memory, a smartphone maker can reserve 12GB+ DRAM for flagship models, and a client device can shift between storage capacities. That means the competitive battle is not only supplier share; it is also memory content per device.

Micron's competitive positives are real. The company has led with 1-gamma DRAM and G9 NAND ramps, according to management's FY2026 commentary. MCBU-specific product evidence includes PC OEM qualifications, client SSD launches, LPDDR5X volume shipments, and LPDDR6 sampling. These points matter because OEM qualification cycles create switching friction. Once a memory product is qualified into a platform, the OEM values yield, quality, supply continuity, power, and performance, not only spot price. Micron's broad DRAM/NAND portfolio lets it participate in both memory and storage content growth in the same device class.

The competitive negatives are equally important. Memory is not a winner-take-all market. Samsung and SK hynix also have deep technology roadmaps, massive manufacturing scale, and strong mobile/customer relationships. NAND has more supplier fragmentation and can be more vulnerable to oversupply. Client SSDs are performance-sensitive at the high end, but a large part of the PC storage market can still become price-competitive when supply normalizes. MCBU therefore has bargaining power in tight markets, but not durable pricing power comparable to a proprietary software platform.

The current cycle also creates allocation tension. Data center AI demand is absorbing a larger share of industry DRAM and NAND. That supports MCBU pricing, but it also means scarce supply may be prioritized toward data-center products with stronger strategic commitments. The Q2 call live pull included a management answer that customers across PCs and smartphones remain important, but data center is becoming a larger part of industry TAM. For MCBU, that is both a tailwind and a constraint: tight supply raises price, but constrained availability can reduce PC/smartphone units and limit bit shipment growth.

5. Segment-Level Moat

MCBU's moat is moderate, not exceptional. The segment has technical barriers, manufacturing scale requirements, qualification friction, and quality advantages. It does not have a long-duration monopoly, network effect, or customer lock-in strong enough to make margins structurally immune. In Gideon terms, MCBU is a cyclical hardware segment with improving secular content intensity, not a standalone compounding engine.

The strongest protective layer is process and product execution. LPDDR and client SSD products need power, performance, packaging, yield, and reliability. OEMs are reluctant to qualify unproven suppliers into major platforms. Micron's technology roadmap, customer quality rankings, and edge-AI product portfolio can keep it relevant in premium SKUs. That can create share stability and mix advantages over weaker suppliers.

The second layer is supply scarcity. DRAM and NAND cleanroom constraints, HBM trade ratios, and long lead times for new capacity can keep industry supply tight beyond a normal one-year spike. If that persists, MCBU can retain above-cycle margins even if PC and smartphone units decline. But supply scarcity is not the same as a moat. It is a favorable industry

structure while it lasts. The risk is that the same high margins that attract praise also incentivize industry capacity additions and customer pushback.

The third layer is AI content. PCs and smartphones are becoming more memory-intensive as local AI features move from demos into user workflows. AI PC memory recommendations and flagship smartphone DRAM mix both support higher content per unit. This can raise the revenue base even in flat unit markets. The moat question is whether Micron captures that value or whether it is competed away. The prudent answer is partial capture. Micron should benefit from the content uplift, but suppliers will still compete for large OEM programs.

Over five to ten years, MCBU's durability depends on execution and cycle management. I would underwrite content growth but not peak margins. A defensible base case should assume that FY2026 TTM margin is above sustainable mid-cycle levels and that revenue growth from the TTM base slows materially as the starting point already embeds a tight-supply pricing surge.

6. Historical Growth Rates From The Data Package

The table below reproduces the dollar-disclosed history available for MCBU. Because Micron does not disclose PC/client and mobile product dollars separately, the reportable MCBU line is the only dollar-disclosed product-level modeling line. DRAM and NAND technology revenue are companywide categories and are not allocated into MCBU.

Product / sub-segment	FY2023 rev	FY2024 rev	FY2025 rev	Current-taxonomy CAGR	Most recent YoY	Data package cite
MCBU total: PC/client and mobile memory/storage combined	$7.39B	$11.67B	$11.86B	26.7% FY2023-FY2025 two-year CAGR	1.6% FY2025 YoY	data_package section 3 MCBU table, lines 128-134
PC/client memory and client SSD	n/d	n/d	n/d	n/d	unit/content commentary only	data_package section 4 product/KPI row, line 210; section 6, lines 239-240
Mobile memory and managed NAND	n/d	n/d	n/d	n/d	unit/content commentary only	data_package section 4 product/KPI row, line 210; section 6, line 241

Arithmetic tie-out for the disclosed MCBU line: $7.39B x 1.578 = $11.66B, which ties to FY2024 revenue of $11.67B within rounding. $11.67B x 1.016 = $11.86B, which ties to FY2025 revenue of $11.86B within rounding. The current-taxonomy two-year CAGR from $7.39B to $11.86B is approximately 26.7%, but that is not a normal trend line; it starts from a severe FY2023 downturn and ends before the FY2026 pricing spike.

Recent quarterly revenue is more informative for the TTM base. Data package section 5 shows MCBU revenue of $3.22B in Q3 FY2025, $3.80B in Q4 FY2025, $4.30B in Q1 FY2026, and $7.70B in Q2 FY2026 [data_package section 5, lines 223-228]. Quant foundation P4 computes exact TTM revenue of $18.981B and TTM operating income of $9.439B [quant_foundation P4, lines 142-149]. This means the forward model starts from a run-rate much higher than FY2025 annual revenue. Treating FY2025 as the base would understate the cycle step-up; treating Q2 FY2026 annualized as the base would overstate the sustainable level.

[DATA GAP: No historical row can break MCBU into PC versus smartphone dollars. This appendix therefore uses the reportable MCBU total for all dollar forecasts and uses PC/mobile commentary only to justify growth and margin assumptions.]

7. Management Guidance From The Data Package

The data package contains three MCBU-specific guidance anchors.

First, for PCs, the Q1 FY2026 call row quotes "high single-digit percentage range" and interprets it as management lifting calendar 2025 PC unit expectations, tied to Windows 10 end-of-life and AI PCs [data_package section 6, line 239]. This matters because PC units were not collapsing before the FY2026 supply squeeze; the demand base had support from refresh cycles and AI PC adoption.

Second, for edge AI devices, the Q2 FY2026 call row quotes "at least 32GB" and interprets agentic AI PCs as requiring higher DRAM content, which can offset unit pressure [data_package section 6, line 240]. This is the most important base-case driver. If the average PC memory configuration rises over the next five years, MCBU can compound revenue without relying on strong PC unit growth.

Third, for smartphones, the Q2 FY2026 call row quotes "nearly 80%" and interprets it as flagship smartphone mix with 12GB+ DRAM rising sharply, making content growth more important than units [data_package section 6, line 241]. This supports a

similar logic in mobile: the device unit cycle may be low-growth, but high-end configuration mix and AI features can lift memory value per device.

There is also one MCBU-relevant caution in section 4: PC and smartphone units may decline low double digits in calendar 2026 because of supply constraints [data_package section 4, line 210]. That prevents a simplistic extrapolation of the Q2 FY2026 run-rate. Management is saying content and price are strong, but units can be rationed by available supply and customer economics.

8. Forward Growth Assumptions

The forward horizon is TTM ending February 26, 2026 to February 26, 2031. The base uses the quant foundation TTM MCBU revenue of $18.981B, not FY2025 revenue and not Q2 FY2026 annualized. Because the data package gives no PC/mobile dollar split, the product line is the reportable MCBU total. The subdrivers are PC/client and mobile content growth, but the dollar model does not allocate undisclosed dollars.

Base Case Growth

Product	Current-taxonomy CAGR	Latest YoY / run-rate signal	Mgmt FY+1 guide	Base CAGR TTM to TTM+5y	Justification
MCBU total: PC/client and mobile memory/storage	26.7% FY2023-FY2025 two-year CAGR; TTM far above FY2025	Q2 FY2026 revenue $7.70B; TTM revenue $18.981B	PC content uplift, AI PC memory at "at least 32GB"; smartphone flagship 12GB+ mix "nearly 80%"; unit caution low-double-digit decline possible	7.0%	The TTM base already reflects tight supply and sharp pricing. Base case assumes content growth and pricing discipline offset slower device units, but margin/revenue growth normalizes as supply expands and customers optimize configurations.

Base case revenue math: $18.981B x 1.07^5 = $26.62B at the February 26, 2031 horizon. This is not a heroic unit forecast. It implies that AI PC and flagship smartphone content growth plus constrained supply add about $7.64B of revenue over five years from the already elevated TTM base. It is materially below the FY2023-FY2025 current-taxonomy CAGR because that historical CAGR begins in a trough and because the forward base begins in a tight-supply peak.

Bull Case Growth

Product	Current-taxonomy CAGR	Latest YoY / run-rate signal	Mgmt FY+1 guide	Bull CAGR TTM to TTM+5y	Justification
MCBU total: PC/client and mobile memory/storage	26.7% FY2023-FY2025 two-year CAGR; TTM far above FY2025	Q2 FY2026 revenue $7.70B; Q2 segment margins at record levels in the 10-Q/call sources	AI PC and flagship smartphone content growth broadens; supply remains tight beyond CY2026	11.0%	Bull case assumes on-device AI becomes a broad configuration requirement, not just a premium feature, and that Micron's LPDDR/client SSD qualifications sustain share while industry supply remains structurally tight.

Bull case revenue math: $18.981B x 1.11^5 = $31.98B. This case requires sustained content uplift and a favorable pricing backdrop. It does not require Q2 FY2026 revenue to annualize at $30B immediately, but it does require the segment to keep most of the pricing/mix uplift and then layer content growth on top.

Bear Case Growth

Product	Current-taxonomy CAGR	Latest YoY / run-rate signal	Mgmt FY+1 guide	Bear CAGR TTM to TTM+5y	Justification
MCBU total: PC/client and mobile memory/storage	26.7% FY2023-FY2025 two-year CAGR; cyclically distorted	Q2 FY2026 revenue spike creates a difficult base	PC/smartphone units may decline low double digits in CY2026 because of supply constraints	-3.0%	Bear case assumes the TTM base is a cyclical overshoot, OEMs reduce configurations or units in response to high memory prices, and supply additions/competitive behavior compress ASPs before content growth can fully offset.

Bear case revenue math: $18.981B x 0.97^5 = $16.30B. That would still be above FY2025 segment revenue, but below the TTM base. It is a plausible bear case because MCBU has already moved from $11.86B FY2025 revenue to $18.981B TTM revenue; a partial mean reversion does not require a collapse in end-market units.

9. Forward Operating Margin Assumptions

The current segment TTM operating margin is 49.7% from quant foundation P4 [quant_foundation P4, lines 142-149]. Q2 FY2026 was even higher, with the FY2026 Q2 10-Q segment table showing a 75.7% operating margin for MCBU. Those figures should be treated as peak-cycle indicators, not normalized economics. FY2025 annual margin was 16.7%, FY2024 was roughly breakeven, and FY2023 was deeply negative [data_package section 3, lines 128-134; raw/B-MCBU-SEC-10Q-FQ2-2026-mu-20260226.htm Segment and Other Information]. A five-year model that leaves MCBU near 50%-plus operating margin must explicitly assume structurally tight supply and durable pricing power. I do not give that to the base case.

Product	Current / TTM margin	Base TTM+5y margin	Mechanism
MCBU total: PC/client and mobile memory/storage	49.7% TTM OI margin; Q2 FY2026 quarterly OI margin 75.7% from the 10-Q segment table	38.0%	Partial mean reversion from peak pricing, offset by AI-content mix, higher premium LPDDR/client SSD attach, node cost execution, and continued tight but less extreme supply.

Product	Current / TTM margin	Bull TTM+5y margin	Mechanism
MCBU total: PC/client and mobile memory/storage	49.7% TTM OI margin; Q2 FY2026 quarterly OI margin 75.7% from the 10-Q segment table	45.0%	Supply remains tight, AI content becomes mandatory in mainstream PCs and flagship smartphones, premium product mix rises, and Micron sustains pricing through customer commitments and qualification strength.

Product	Current / TTM margin	Bear TTM+5y margin	Mechanism
MCBU total: PC/client and mobile memory/storage	49.7% TTM OI margin; Q2 FY2026 quarterly OI margin 75.7% from the 10-Q segment table	22.0%	ASPs normalize faster than cost reductions, OEMs resist high memory content, consumer elasticity reduces units/mix, and NAND/client SSD competition compresses margin.

The base case margin of 38% is deliberately below current TTM but above FY2025. It reflects a view that AI content and supply discipline improve the cycle versus the pre-AI memory market, but that MCBU still cannot be valued as if Q2 FY2026 margins are permanent. The bull case of 45% assumes a durable shortage and premium mix. The bear case of 22% is still above FY2025's 16.7%, because even a downshift from TTM should leave some AI-content and supply-constraint benefit by 2031, but it recognizes that a segment which lost money in FY2023 can revert hard.

10. Segment Rollup

Because MCBU has no dollar-disclosed subsegment split, the rollup is a single reportable-segment line. This is not ideal, but it is cleaner than fabricating PC/mobile revenue. Product-level assumptions reconcile to segment totals by construction.

Case	Product / disclosed line	TTM revenue	CAGR to Feb. 26, 2031	Horizon revenue	Horizon op margin	Horizon op income
Bear	MCBU total	$18.981B	-3.0%	$16.30B	22.0%	$3.59B
Base	MCBU total	$18.981B	7.0%	$26.62B	38.0%	$10.12B
Bull	MCBU total	$18.981B	11.0%	$31.98B	45.0%	$14.39B

Arithmetic checks: base revenue $18.981B x 1.07^5 = $26.62B, and $26.62B x 38.0% = $10.12B. Bull revenue $18.981B x 1.11^5 = $31.98B, and $31.98B x 45.0% = $14.39B. Bear revenue $18.981B x 0.97^5 = $16.30B, and $16.30B x 22.0% = $3.59B. All product-line totals reconcile to segment totals within rounding because the reportable segment total is the only dollar-disclosed line.

The most important modeling judgment is not the exact CAGR; it is the margin fade. Starting from 49.7% TTM operating margin, the base case gives back 1,170 bps by 2031. If MCBU keeps margins near 50%, consolidated earnings power will be much higher than this appendix's base case. If the segment falls back to mid-teens margins, the base case is too optimistic. The synthesis agent should therefore stress test Micron's whole-company FY+5 EPS against MCBU margin, not just revenue growth.

11. Key Risks And Wildcards

Bear risk - cycle mean reversion. The TTM base includes a period of extreme supply tightness and pricing. If FY2026 is a memory supercycle peak, MCBU can decline from the TTM base even while AI content grows. The bear case explicitly models revenue shrinking at a 3% CAGR and margin fading to 22%.

Bear risk - consumer elasticity. PCs and smartphones are not hyperscale AI clusters. If memory pricing forces OEMs to raise device prices or cut configurations, unit demand and mix can weaken. Management already acknowledged possible low-double-digit PC and smartphone unit declines in calendar 2026 due to supply constraints [data_package section 4, line 210].

Bear risk - NAND/client SSD competition. Client SSDs can become price-competitive when NAND supply loosens. If G9 QLC and premium SSD attach do not offset pricing pressure, MCBU margin can compress faster than DRAM-led content growth suggests.

Base risk - allocation away from MCBU. Data center/HBM products may consume the most attractive wafer starts and customer commitments. That can support company margin but cap MCBU bit shipments. MCBU may remain strategically important without being the top internal capital-allocation priority.

Bull wildcard - AI PC configuration step-change. If 32GB becomes mainstream rather than premium, PC memory content can step up across a broad unit base. That would make the base case revenue CAGR too low.

Bull wildcard - flagship smartphone content. If 12GB+ DRAM and higher managed NAND capacities diffuse from flagship to mid-tier phones, mobile memory content could grow despite modest unit growth.

Bull wildcard - strategic customer agreements across non-data-center markets. Management has described strategic customer agreements across multiple markets in the live transcript pull. If similar structures reach PC/mobile customers with meaningful commitments, MCBU margins may become less cyclical than historical memory precedent.

Data wildcard - no product split. The largest analytical limitation is the absence of PC versus mobile dollar disclosure. If one submarket is structurally better than the other, the segment-level model hides that mix. This is a real gap and should be preserved in synthesis rather than smoothed away.

Summary Table

Case	Segment TTM+5y Revenue	Segment TTM+5y Op Margin	Segment TTM+5y Op Income	Probability
Bear	$16.30B	22.0%	$3.59B	25%
Base	$26.62B	38.0%	$10.12B	50%
Bull	$31.98B	45.0%	$14.39B	25%

Synthesis handoff note: use the base case as the primary MCBU contribution, but do not average the cases mechanically without considering cycle state. The bear case is not a recession case; it is a normalization case from an unusually strong TTM base. A true downturn could push revenue and margin below the bear table, while a persistent shortage could keep margin closer to current TTM for longer than modeled. The most useful sensitivity for the combined earnings model is every 500 bps of MCBU operating margin at base-case horizon revenue, which equals about $1.33B of operating income. That sensitivity is large enough to affect Micron's FY+5 EPS verdict.

Bottom line: MCBU is a high-beta beneficiary of on-device AI memory content, but it is not a clean secular compounder. The base case assumes AI content and supply discipline lift the segment above old-cycle economics, while still fading current TTM margins from a likely peak. The synthesis should treat MCBU as a meaningful earnings contributor with high downside sensitivity to ASPs and consumer elasticity.

Appendix B3 - CDBU

Core Data Center Business Unit (CDBU) - Segment Deep Dive

Stage 0 anchor used throughout: Today is 2026-04-29. Micron uses a 52/53-week fiscal year ending on the Thursday closest to August 31. The latest reported quarter is Q2 FY2026, ended February 26, 2026. TTM equals Q3 FY2025 plus Q4 FY2025 plus Q1 FY2026 plus Q2 FY2026, ending February 26, 2026. The forward horizon is February 26, 2031, exactly five calendar years after the TTM anchor. All FY+5 references below mean TTM to TTM+5y, not FY2025 to FY2030 and not six fiscal years.

0. Segment boundary and taxonomy note

CDBU is a current Micron reportable segment under the FY2025 reorganization. Taxonomy correction: the dispatch label says "Cloud Memory Business Unit (CDBU)," but Micron's current taxonomy defines CDBU as Core Data Center Business Unit and defines Cloud Memory Business Unit as CMBU [data_package guardrails, lines 54-55; quant_foundation P-Taxonomy, line 104]. This appendix therefore models CDBU, not CMBU, while preserving the requested output path. The taxonomy is not stable across five years: Micron began managing under the CMBU/CDBU/MCBU/AEBU structure in Q4 FY2025 and retrospectively adjusted FY2023-FY2025 in the FY2025 Form 10-K. The data package calls this a hard taxonomy break: FY2023-FY2025 are comparable under the current structure, while FY2021-FY2022 are legacy CNBU/MBU/EBU/SBU and must not be spliced into CDBU growth rates [data_package Section 1, line 64]. This appendix uses current-taxonomy CDBU dollars only for FY2023-FY2025 and uses the quant foundation's TTM construction for the live anchor [quant_foundation P4, line 147].

1. What this segment actually is

CDBU stands for Core Data Center Business Unit. It is not all of Micron's data center exposure, and it is not a synonym for NAND. The quant foundation quotes the FY2026 Q2 10-Q definition: CDBU is focused on memory solutions for mid-tier cloud, enterprise, and OEM data center customers and storage solutions for all data center customers [quant_foundation P-Taxonomy, line 104]. That boundary matters. HBM for all data center customers sits in CMBU, not CDBU. Large hyperscale cloud memory also sits in CMBU. CDBU therefore carries the more traditional but now AI-accelerated data center memory and storage franchises: DDR5 and DDR4 server memory sold to OEM and enterprise data center channels; component NAND sold into data center use cases; and data center SSDs, where Micron combines NAND, controllers, firmware, and in some products DRAM into higher-value storage systems.

The FY2025 Form 10-K describes CDBU as including data center SSDs and NAND components, and says CDBU sales to OEM data center customers are driven by server and storage demand to support mid-tier cloud and enterprise customers [raw/A-SEC-10K-FY2025-mu-20250828.txt lines 1971-1978]. The same filing says 2025 CDBU sales to the data center SSD market consisted primarily of the 5400, 6500 ION, 7450, 7500, and 9550 series SSDs, and that CDBU sales also included DDR5, DDR4, QLC NAND, and TLC NAND [raw/A-SEC-10K-FY2025-mu-20250828.txt line 1978]. This is a mixed hardware segment: commodity-like DRAM and NAND inputs, but with a growing systems layer in enterprise and data center SSDs where controller, firmware, qualification, power efficiency, and total-cost-of-ownership features can matter.

The customer set is also mixed. Mid-tier cloud and enterprise customers still buy server memory and storage to support conventional compute, database, virtualization, private cloud, and storage workloads. AI changes the growth rate because inference, vector search, model-serving caches, retrieval-augmented generation, and analytics create larger working sets and more frequent storage access. But CDBU is not the portion of Micron that captures HBM in frontier AI accelerators. It participates through server DRAM content, LP/DDR roadmaps, NAND bit demand, and SSD design wins that attach to AI and conventional data-center buildouts.

Pricing is negotiated, short-cycle, and cyclical. Micron's FY2025 10-K says customers are generally reluctant to enter long-term fixed-price contracts in volatile industry conditions, and that Micron typically uses long-term agreements where pricing, quantity, and other terms are periodically negotiated to reflect market conditions and demand [raw/A-SEC-10K-FY2025-mu-20250828.txt line 2016]. The data package preserves only the corporate-level quote that demand and supply tightness may persist beyond calendar 2026, not a CDBU-specific contract-duration or price-commitment guide [data_package Section 6, line 242]. For CDBU modeling, this means current results are very high quality for near-term earnings but not permanently annuity-like.

2. Current economics

CDBU's latest reliable annual base is FY2025 revenue of $7.23 billion, equal to 19.3% of Micron revenue, with $2.18 billion of operating income and a 30.2% operating margin [data_package Section 1 row CDBU, line 69; data_package Section 3 CDBU, line 120]. The TTM base is much larger because Q1 and especially Q2 FY2026 captured a severe upcycle in data-center memory and NAND pricing. The quant foundation constructs CDBU TTM revenue as FY2025 revenue of $7.229 billion less FY2025 H1 revenue of $4.122 billion plus FY2026 H1 revenue of $8.066 billion, yielding $11.173 billion of TTM revenue. TTM CDBU operating income is $5.397 billion and TTM operating margin is 48.3% [quant_foundation P4, line 147].

The most recent quarter is not a normal run-rate but is still the right anchor for the TTM. Q2 FY2026 CDBU revenue was $5.687 billion, up from $2.379 billion in Q1 FY2026 and $1.830 billion in Q2 FY2025, according to the FY2026 Q2 10-Q business unit table [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt lines 4036-4046]. CDBU Q2 FY2026 operating income was $3.809 billion, or 67% of revenue, versus $0.890 billion, or 37%, in Q1 FY2026 and $0.611 billion, or 33%, in Q2 FY2025 [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt lines 4162-4177]. Micron attributes the sequential CDBU revenue increase to average selling prices and bit shipments, and the operating-income increase to average selling prices, higher bit shipments, and favorable mix [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt lines 4111-4115 and 4237-4241].

Product economics are less granular than the segment economics. The data package explicitly says Micron does not disclose HBM, data center SSD, enterprise SSD, client SSD, mobile DRAM, automotive, industrial, PC, or smartphone product revenues as full historical dollar series. The finest dollar-disclosed product view is total company revenue by technology: DRAM, NAND, and Other/NOR [data_package Section 4, line 198]. The CDBU-specific product KPI available from management is not a full annual series: the data package states that the data center NAND portfolio exceeded $1 billion in Q1 FY2026 and that Q2 FY2026 data center NAND revenue more than doubled sequentially [data_package Section 4 KPI row, line 209; data_package Section 6 rows, lines 237-238]. This creates a live modeling constraint. The segment is clearly being pulled upward by data center NAND/SSD, but the product split inside CDBU is not separately disclosed and must not be presented as historical fact.

Capital intensity is corporate rather than segment-disclosed. Micron does not identify or report internally segment capital expenditures, and the FY2026 Q2 10-Q states that assets and capital expenditures are not allocated by segment [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt line 3332]. Still, CDBU is tied to the same manufacturing system that creates Micron's DRAM and NAND bits. The corporate capex guide is above $25 billion for FY2026, and the Q2 10-Q says Micron must keep investing in manufacturing technologies, facilities, equipment, and R&D to support growth and operating efficiency [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt line 4313]. For CDBU, the economic implication is simple: the segment can print very high operating margin when industry pricing is tight, but sustaining revenue growth requires massive wafer, node, controller, and qualification investment at the corporate level.

3. Unit economics

CDBU revenue turns into profit through three interacting mechanisms: industry pricing, bit shipment growth, and mix. In Q2 FY2026, Micron's consolidated NAND revenue increased 82% sequentially, primarily from a high-70% increase in average selling prices and a low-single-digit increase in bit shipments [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt lines 3984-3988]. The same quarter's CDBU revenue increased 139% sequentially, with management citing average selling prices and bit shipments [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt lines 4111-4115]. Because CDBU contains both data center SSD/NAND and server memory, the combined segment benefits when NAND pricing tightens, when data center SSD mix rises, when server DRAM pricing tightens, and when customers shift to higher-capacity DDR5 and high-performance SSD platforms.

Gross margin is mostly the product of pricing versus wafer cost, with mix as an amplifier. Micron's Q2 FY2026 10-Q says consolidated gross margin rose to 74% from 56% sequentially due to improvements in margins for both DRAM and NAND, driven primarily by average selling prices, favorable mix, and manufacturing cost reductions [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt lines 4002-4004]. That description is directional for CDBU, not a product-level CDBU disclosure. When high-performance data center SSDs, QLC capacity SSDs, G9 NAND, DDR5, and other qualified server products take share of segment revenue, segment margin improves because the product is less like a spot commodity and more like a qualified system component. Conversely, when industry supply catches up and customers renegotiate lower ASPs, the same fixed manufacturing base can compress margin very quickly.

Operating expenses are allocated to CDBU based on activity. The Q2 10-Q states that segment performance includes segment revenue, cost of goods sold, operating expenses, and operating income, while certain indirect operating income and expenses are allocated based on cost of goods sold or forecasted wafer production [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt line 3332]. In the FY2025 segment table, CDBU had $7.229 billion of revenue,

$3.995 billion of COGS, $864 million of R&D, $188 million of SG&A, and $2.180 billion of operating income [quant_foundation P2, line 74]. The implied unit economics were $3.234 billion of gross profit, $1.052 billion of segment operating expense and other items, and a 30.2% operating margin. The FY2026 TTM margin of 48.3% shows what happens when pricing and mix improve faster than allocated operating expenses.

The most important margin risk is that CDBU is not a software business. A 67% quarterly operating margin in Q2 FY2026 is the product of extreme supply tightness, unusually favorable pricing, and mix. The underlying memory and storage industry remains capital-intensive, commodity-exposed, and historically cyclical. Micron's filing states that cash generated from operations is highly dependent on product selling prices, which can vary significantly from period to period [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt line 4309]. Therefore, the right FY+5 margin is not the Q2 FY2026 margin. It should be a normalized margin that gives some credit for AI-driven demand, data center SSD mix, and customer qualification, but also allows for future supply response and price negotiation.

4. Competitive dynamics

CDBU competes inside two hard markets: semiconductor memory and enterprise/data center storage. In DRAM and NAND, the FY2025 10-K names Samsung Electronics, SK hynix, Kioxia, Sandisk, CXMT, and YMTC as competitors [raw/A-SEC-10K-FY2025-mu-20250828.txt line 2019]. The same risk discussion warns that competitors can use aggressive pricing to obtain share and that some competitors have larger scale, greater resources, or government support [raw/A-SEC-10K-FY2025-mu-20250828.txt lines 2019-2020]. This is a crucial check on CDBU optimism: even if AI creates a better demand backdrop, memory remains one of the few technology markets where competitors can destroy economics by adding capacity ahead of demand.

The CDBU-specific competitive edge is not broad memory share alone. It is qualification in data center SSDs and server platforms. Micron says its 9550 SSD was qualified and began shipping in 2025 for AI, high-performance computing, and other workloads, and that its 6550 ION SSD delivers lower power, better performance, and better data center footprint efficiency with more density per rack [raw/A-SEC-10K-FY2025-mu-20250828.txt line 1977]. These claims matter because hyperscale and enterprise data centers evaluate storage by latency, throughput, endurance, power, thermals, firmware maturity, drive failure behavior, and operational qualification, not only by dollars per terabyte. Micron's vertical integration gives it NAND, controller, firmware, DRAM, and system-level design levers, but rivals have similar ambitions.

The direct SSD competitors are not all identical to the DRAM competitors. Samsung is a broad DRAM/NAND/SSD competitor. SK hynix competes in DRAM and NAND and through Solidigm in SSDs. Kioxia and Sandisk are NAND and storage competitors. YMTC is a NAND and 3D NAND threat, including in litigation referenced in Micron's FY2026 Q2 10-Q [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt lines 2866-2883]. HDD vendors are not direct NAND competitors but they remain a substitution reference in bulk storage. Micron's management argued in the Q2 FY2026 call that the 122TB high-capacity SSD delivers materially better throughput per watt than a capacity-matched HDD configuration; the data package records the data center NAND momentum but not that full product-performance claim [data_package Section 4 row, line 209]. The investment conclusion is that SSDs can take share from HDD in capacity tiers when power and rack density matter, but NAND cost per bit still controls the pace of substitution.

Pricing power is strongest when customer qualification and supply scarcity coincide. In the current cycle, that is happening. Micron says AI-driven memory and storage growth is outpacing industry supply, and that the data center has accelerated demand faster than Micron or the industry can increase supply [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt line 3766]. This supports current CDBU margins. But the 10-K also warns that competitors may increase capital expenditures, that worldwide supply could rise, and that supply growth without commensurate demand would pressure average selling prices [raw/A-SEC-10K-FY2025-mu-20250828.txt line 2021]. That warning is not boilerplate for this segment; it is the core cyclicality of the model.

5. Moat at the segment level

CDBU has a real but bounded moat. The strongest protection is technical and qualification depth in data center products. A data center SSD is not just raw NAND. The 10-K describes products that combine NAND, controllers, firmware, and sometimes DRAM [raw/A-SEC-10K-FY2025-mu-20250828.txt line 1921], and Micron specifically highlights internally designed and vertically integrated engineering capability for its 9550 and 6550 ION SSD platforms [raw/A-SEC-10K-FY2025-mu-20250828.txt line 1977]. Enterprise and data center customers are reluctant to redesign storage and memory qualification every quarter simply to chase small price differences, especially when reliability, power, and fleet software behavior matter. That creates some switching friction.

The second moat element is manufacturing know-how. Micron's 10-K says it invests in proprietary product and process technology to increase bit density per wafer and reduce per-bit manufacturing cost [raw/A-SEC-10K-FY2025-mu-20250828.txt line 1900]. In NAND, G9 is a current node, and in CDBU the data center SSD roadmap uses G8/G9 products and PCIe Gen6 platforms. Process leadership is not permanent, but it is hard to copy quickly because it requires years of capex, yield learning, controller integration, customer qualification, and reliability data.

The third moat element is customer intimacy. Micron says it collaborates early in product life cycles to design features and performance characteristics into products and meet customer timelines [raw/A-SEC-10K-FY2025-mu-20250828.txt line 2011]. In CDBU, this can matter more than in low-end spot NAND because data center buyers need predictable platforms. However, customer concentration is a risk as well as a moat. The FY2025 10-K says approximately one-half of total revenue in each of the last three years came from the top ten customers [raw/A-SEC-10K-FY2025-mu-20250828.txt line 2017]. Large customers have purchasing power, and they can dual-source.

The segment does not have a 20-year software-style moat. It has a cyclical hardware moat: scale, technology cadence, qualification, vertical integration, and customer roadmap alignment. That can preserve good margins across a cycle if supply discipline holds and if AI storage intensity is durable. It cannot prevent a bear case where NAND or DRAM capacity arrives faster than demand, or where Chinese competitors pressure commodity components. My base case therefore assumes CDBU retains a premium to historical NAND-like economics but does not retain Q2 FY2026 operating margins.

6. Historical growth rates - reproduced from the data package

Current-taxonomy CDBU history is available only for FY2023-FY2025. FY2021-FY2022 are legacy segment periods and are not included. No product-level CDBU dollar series is disclosed for data center SSD, enterprise SSD, DDR5 server memory, component NAND, QLC, or TLC. The table below therefore uses the only dollar-disclosed CDBU line: segment total. The "3-year CAGR" column is marked as unavailable because there are only three fiscal-year points under the current taxonomy, which supports a two-year CAGR over FY2023 to FY2025 but not a full three-year CAGR.

Product / sub-segment	FY-3 rev	FY-2 rev	FY-1 rev	3-yr CAGR	Most recent YoY	Data package cite
CDBU total, current taxonomy	$2.12B [data_package Section 3 CDBU row, line 120]	$4.98B [data_package Section 3 CDBU row, line 120]	$7.23B [data_package Section 3 CDBU row, line 120]	n/a; two-year CAGR 84.7% because current taxonomy starts FY2023 [data_package Section 1, line 64]	45.0% FY2025 YoY [data_package Section 3 CDBU row, line 120]	FY2025 10-K restated Segment and Other Information; data_package Section 3
Data center SSD / data center NAND within CDBU	n/d [DATA GAP: no product dollar series]	n/d [DATA GAP: no product dollar series]	n/d [DATA GAP: no product dollar series]	n/d	Q1 FY2026 data center NAND exceeded $1B; Q2 FY2026 more than doubled sequentially [data_package Section 4 row, line 209; Section 6 rows, lines 237-238]	FMP transcripts Q1 FY2026 and Q2 FY2026 as summarized in data_package
Enterprise/OEM server memory and component NAND within CDBU	n/d [DATA GAP: no product dollar series]	n/d [DATA GAP: no product dollar series]	n/d [DATA GAP: no product dollar series]	n/d	n/d by product	FY2025 10-K product description in data_package Section 1 and quant_foundation P-Taxonomy

Arithmetic tie-out: FY2023 CDBU revenue of $2.12B times 2.347 equals $4.98B, consistent with the disclosed FY2024 YoY of 134.7%. FY2024 revenue of $4.98B times 1.450 equals $7.22B, consistent with the disclosed FY2025 revenue of $7.23B within rounding. No product-level back-solved dollars are used; the data package explicitly says it does not back-solve data center SSD or HBM dollars [data_package Section 4, line 198; Section 10, line 279].

The TTM bridge is also important because FY2025 is already stale relative to the current upcycle. The quant foundation's CDBU TTM revenue is $11.173B, built from FY2025 revenue less FY2025 H1 plus FY2026 H1 [quant_foundation P4, line 147]. This TTM figure is the starting point for the five-year forecast. The Q2 FY2026 quarterly run-rate is much higher than the TTM, but the model does not annualize a single boom quarter as the base case because the segment is cyclical and supply response is likely over a five-year horizon.

7. Management guidance quoted from the data package

Management commentary specific to CDBU is limited but useful:

Segment / topic	Data package row	Verbatim quote	Interpretation
CDBU / data center SSD	Section 6 row, line 237	"more than doubled sequentially"	Data center NAND revenue accelerated sharply in Q2 FY2026. The relevant conclusion is not a disclosed annual base, but an inflection in data center storage demand and mix.
CDBU / data center SSD	Section 6 row, line 238	"exceeded $1 billion"	Q1 FY2026 data center NAND crossed a quarterly scale threshold. Because Q2 more than doubled from that level, CDBU's storage subline is no longer a small adjacency.
Corporate supply / DRAM and NAND	Section 6 row, line 242	"beyond calendar 2026"	Management expects tight conditions beyond CY2026. This supports above-cycle margins in the near term but does not eliminate five-year supply-cycle risk.
Corporate capex	Section 6 row, line 243	"above $25 billion"	Capacity is being added, but lead times are long. The model gives CDBU growth credit for demand but reduces FY+5 margin versus Q2 FY2026 as capacity normalizes.

[DATA GAP: management does not provide a full CDBU product revenue guide, data center SSD annual revenue guide, or FY+5 CDBU operating margin target in the data package.]

8. Forward growth assumptions - explicit, per product, justified

The starting point is $11.173B of CDBU TTM revenue [quant_foundation P4, line 147]. Because CDBU product-level historical dollars are not disclosed, the product split below is a model allocation, not a reported historical split. I allocate the TTM starting base as $5.0B to data center SSD / data center NAND storage and $6.173B to enterprise/OEM server memory plus component NAND. The allocation is anchored to the data package's Q1 FY2026 data center NAND "exceeded $1B" and Q2 FY2026 "more than doubled sequentially" commentary, which implies data center NAND was already at least a multi-billion-dollar H1 FY2026 revenue contributor [data_package Section 4 row, line 209]. It is still flagged as a model allocation because the full annual series is not disclosed.

Base case growth

Product / modeled sub-segment	TTM model revenue	Current historical anchor	Latest YoY / trend	Mgmt FY+1 guide	Base CAGR TTM to TTM+5y	FY+5 revenue	Justification
Data center SSD / data center NAND storage	$5.00B	n/d product dollars; CDBU total two-year current-taxonomy CAGR 84.7%	Q1 FY2026 exceeded $1B; Q2 more than doubled sequentially	Tight NAND conditions beyond CY2026; no product dollar guide	18.0%	$11.44B	The line decelerates sharply from the Q2 FY2026 surge because NAND supply will respond, but AI storage, vector database, KV-cache offload, SSD share gains, and G9/PCIe Gen6 qualification support a mid-teens-plus five-year CAGR.
Enterprise/OEM server memory and component NAND	$6.173B	n/d product dollars; CDBU total two-year current-taxonomy CAGR 84.7%	CDBU Q2 revenue +139% sequential, +211% YoY	No CDBU-specific FY+1 product dollar guide; corporate server-unit commentary is only a directional demand indicator	14.0%	$11.88B	Server DRAM and component NAND benefit from AI-led server content and enterprise refresh, but this line lacks HBM and large hyperscale cloud memory, so growth normalizes below CDBU's recent boom rate.

Product / modeled sub-segment	TTM model revenue	Current historical anchor	Latest YoY / trend	Mgmt FY+1 guide	Base CAGR TTM to TTM+5y	FY+5 revenue	Justification
CDBU total	$11.173B	FY2023-FY2025 current-taxonomy total only	FY2025 +45.0%; TTM +54.6% vs FY2025	No explicit CDBU FY+1 dollar guide	15.9% blended	$23.32B	Base case assumes the Q2 FY2026 step-up is partially durable, but the five-year endpoint is only roughly in line with the Q2 annualized run-rate, not a continuation of Q2 sequential growth.

Base-year deceleration path for CDBU total: +32% in year 1, +20% in year 2, +13% in year 3, +8% in year 4, and +7% in year 5, producing approximately the same five-year endpoint as the blended product CAGRs. The front-loaded shape reflects current supply shortage and existing design-win momentum. The later years assume added industry supply, customer renegotiation, and a shift from shortage pricing to more normal data-center SSD and server-memory growth.

Bull case growth

Product / modeled sub-segment	TTM model revenue	Current historical anchor	Latest YoY / trend	Mgmt FY+1 guide	Bull CAGR TTM to TTM+5y	FY+5 revenue	Justification
Data center SSD / data center NAND storage	$5.00B	n/d product dollars; CDBU total two-year CAGR 84.7%	Q2 FY2026 data center NAND more than doubled sequentially	Tight NAND conditions beyond CY2026	26.0%	$15.91B	Bull case assumes SSDs gain faster share in capacity storage tiers, Micron sustains record data center SSD share momentum, and NAND supply remains disciplined despite new capacity.
Enterprise/OEM server memory and component NAND	$6.173B	n/d product dollars; CDBU total two-year CAGR 84.7%	Q2 FY2026 CDBU +211% YoY	No CDBU-specific FY+1 product dollar guide; corporate server-unit commentary and data-center bit tightness are directional, not segment guidance	22.0%	$16.70B	Bull case assumes AI inference and traditional server refresh both require materially more memory per server, while CDBU's non-hyperscale customers stay supply-constrained through much of the forecast period.
CDBU total	$11.173B	FY2023-FY2025 current-taxonomy total only	FY2025 +45.0%; Q2 FY2026 extreme upcycle	No explicit CDBU FY+1 dollar guide	23.9% blended	$32.61B	This is a tight-supply, strong-content, favorable-mix case where Q2 FY2026 is not a one-off but an early sign of a structurally larger storage and server-memory pool.

Bull deceleration path: +45% in year 1, +30% in year 2, +22% in year 3, +16% in year 4, and +10% in year 5. This is demanding but not a straight-line extrapolation of Q2 FY2026. It requires continued supply constraints, successful G9 and later NAND transitions, and customer willingness to sign or honor multi-year visibility agreements.

Bear case growth

Product / modeled sub-segment	TTM model revenue	Current historical anchor	Latest YoY / trend	Mgmt FY+1 guide	Bear CAGR TTM to TTM+5y	FY+5 revenue	Justification
Data center SSD / data center NAND storage	$5.00B	n/d product dollars; CDBU total two-year CAGR 84.7%	Q1/Q2 FY2026 sharply higher	Tight beyond CY2026, but no guaranteed product guide	6.0%	$6.69B	Bear case assumes the current NAND shortage attracts supply, SSD price per bit falls faster than bit growth, and hyperscale/enterprise customers dual-source aggressively.

Product / modeled sub-segment	TTM model revenue	Current historical anchor	Latest YoY / trend	Mgmt FY+1 guide	Bear CAGR TTM to TTM+5y	FY+5 revenue	Justification
Enterprise/OEM server memory and component NAND	$6.173B	n/d product dollars; CDBU total two-year CAGR 84.7%	CDBU Q2 +139% sequential	No CDBU-specific FY+1 product dollar guide; corporate server-unit commentary is not a five-year segment guarantee	3.0%	$7.16B	Bear case assumes enterprise/OEM demand normalizes after the refresh surge, commodity DRAM pricing rolls over, and CDBU lacks HBM exposure to offset a conventional server slowdown.
CDBU total	$11.173B	FY2023-FY2025 current-taxonomy total only	FY2025 +45.0%; TTM boosted by Q2 FY2026	No explicit CDBU FY+1 dollar guide	4.4% blended	$13.85B	This case still grows from TTM because AI storage demand is real, but most of the Q2 FY2026 pricing windfall is competed away before the horizon.

Bear deceleration path: +15% in year 1, -8% in year 2, -3% in year 3, +6% in year 4, and +13% in year 5. That shape captures a memory-cycle drawdown followed by a normalized recovery. It is consistent with the risk that current TTM embeds an extraordinary Q2 quarter, not a steady base.

9. Forward operating margin assumptions

Current CDBU TTM operating margin is 48.3%, built from $5.397B of TTM operating income on $11.173B of TTM revenue [quant_foundation P4, line 147]. FY2025 margin was 30.2% [data_package Section 3 CDBU, line 120]. Q2 FY2026 margin was 67% [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt lines 4162-4177]. This spread defines the modeling problem. The current TTM is above normal because Q2 FY2026 pricing, bit shipments, and mix were exceptionally favorable. FY2025 is a more complete annual period but already reflects a recovery. My FY+5 assumptions deliberately sit below Q2 FY2026 but above pre-boom levels in base and bull.

Product / modeled sub-segment	TTM margin anchor	Base FY+5 margin	Mechanism
Data center SSD / data center NAND storage	n/d product margin; CDBU TTM 48.3%	32.0%	SSD qualification, controller/firmware value, and AI storage mix support a margin above commodity NAND, but supply response and price-per-bit declines normalize the Q2 FY2026 windfall.
Enterprise/OEM server memory and component NAND	n/d product margin; CDBU TTM 48.3%	38.0%	DDR5/server content, supply tightness, and operating leverage keep margins strong, but absence of HBM and eventual DRAM capacity additions keep the line below current TTM.
CDBU total	48.3% TTM	35.0%	Revenue-weighted result. The 1,330 bp decline from TTM is driven by normalized ASPs, future supply additions, and lower shortage economics.

Product / modeled sub-segment	TTM margin anchor	Bull FY+5 margin	Mechanism
Data center SSD / data center NAND storage	n/d product margin; CDBU TTM 48.3%	39.0%	Bull case assumes high-capacity and performance SSD mix, QLC density, power-efficiency value, and customer qualification offset NAND price erosion.
Enterprise/OEM server memory and component NAND	n/d product margin; CDBU TTM 48.3%	45.0%	Tight server DRAM conditions, content growth, and operating leverage keep the line close to TTM economics even after some normalization.
CDBU total	48.3% TTM	42.1%	Revenue-weighted result. This remains below Q2 FY2026, but assumes the AI cycle has structurally lifted normalized data-center memory and storage profitability.

Product / modeled sub-segment	TTM margin anchor	Bear FY+5 margin	Mechanism
Data center SSD / data center NAND storage	n/d product margin; CDBU TTM 48.3%	15.0%	NAND oversupply, customer dual-sourcing, and rapid price-per-bit erosion turn SSD growth into lower-margin volume growth.
Enterprise/OEM server memory and component NAND	n/d product margin; CDBU TTM 48.3%	21.0%	DRAM pricing normalizes, enterprise refresh slows, and CDBU lacks HBM margin support; still profitable due to node efficiency and data-center content.
CDBU total	48.3% TTM	18.1%	Revenue-weighted result. The decline is severe but not a return to FY2023 losses because the five-year horizon still includes structurally larger AI/storage demand.

The margin assumptions also reflect cost and capex realities. Micron has to spend on manufacturing technology, facilities, equipment, and R&D, and FY2026 capex is expected to be above $25B [raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt line 4313]. More capacity improves long-run supply but also raises depreciation and can weaken industry pricing if the capacity arrives into a softer demand environment. Therefore, higher revenue does not mechanically mean higher margin in the model.

10. Segment rollup - bottoms-up arithmetic

The rollup below uses the product allocations and margins from Sections 8 and 9. Because Micron does not disclose CDBU product-level historical dollars, the product split is a forward modeling device and is flagged as such. The segment total reconciles exactly to the modeled product lines.

Case	Data center SSD / NAND revenue	Enterprise/OEM memory and component NAND revenue	Segment FY+5 revenue	Blended FY+5 op margin	Segment FY+5 operating income
Bear	$6.69B	$7.16B	$13.85B	18.1%	$2.51B
Base	$11.44B	$11.88B	$23.32B	35.0%	$8.17B
Bull	$15.91B	$16.70B	$32.61B	42.1%	$13.72B

Base arithmetic: $11.44B times 32.0% equals $3.66B; $11.88B times 38.0% equals $4.51B; total operating income is $8.17B on $23.32B of revenue, or 35.0%. Bull arithmetic: $15.91B times 39.0% equals $6.20B; $16.70B times 45.0% equals $7.52B; total operating income is $13.72B on $32.61B of revenue, or 42.1%. Bear arithmetic: $6.69B times 15.0% equals $1.00B; $7.16B times 21.0% equals $1.50B; total operating income is $2.51B on $13.85B of revenue, or 18.1%. Each case reconciles within rounding.

The key judgment is that CDBU should not be modeled as though Q2 FY2026 is a permanent 67% operating-margin run-rate. The base case instead treats Q2 FY2026 as evidence of a higher ceiling and better mix, while FY2025's 30.2% margin and the FY2026 TTM's 48.3% margin frame the sustainable range. On revenue, the base case reaches $23.32B by February 2031. That is a 15.9% CAGR from TTM, but it is only modestly above the Q2 FY2026 annualized revenue run-rate of roughly $22.7B. In other words, the base case assumes the current step-up is not fully lost, but it also assumes no continuation of the Q2 FY2026 vertical ramp.

11. Key risks and wildcards

Bear risk - Supply response and pricing reversal. The largest risk is that current margins are peak-cycle margins. Micron itself warns that competitor capex and worldwide supply growth, if not matched by demand, could pressure average selling prices [raw/A-SEC-10K-FY2025-mu-20250828.txt line 2021]. In that case, CDBU could grow bits but lose revenue and operating income through price-per-bit declines.

Bear risk - Product split opacity. CDBU's data center NAND and SSD momentum is material, but Micron does not provide a full annual dollar series. If the Q1/Q2 FY2026 data center NAND surge is narrower or less durable than it appears, the forward storage line is overstated. This is the most important data gap in the appendix.

Bear risk - Customer bargaining power. The top ten customers represent roughly half of Micron revenue [raw/A-SEC-10K-FY2025-mu-20250828.txt line 2017]. Large data center customers can qualify multiple vendors, negotiate aggressively, and shift mix if Micron prices too high.

Bear/base risk - China and geopolitics. Micron's filings identify CAC restrictions and litigation involving YMTC; the competitive backdrop includes government-supported entrants and trade barriers [raw/A-SEC-10K-FY2025-mu-20250828.txt lines 2019-2020; raw/A-SEC-10Q-FQ2-2026-mu-20260226.txt lines 2866-2883]. These risks matter to CDBU because NAND and SSD markets have Chinese supply and IP pressure.

Base wildcard - AI storage intensity. If vector databases, retrieval workloads, KV-cache offload, and AI data pipelines become mainstream, SSD demand could remain tight longer than a normal NAND cycle. This is the driver behind the base 18% storage CAGR.

Bull wildcard - SSD substitution for HDD capacity tiers. If power, rack density, and throughput per watt drive faster replacement of hard drives in data centers, Micron's high-capacity SSD portfolio could create more durable CDBU growth than the base case assumes.

Bull wildcard - Sustained supply tightness. The data package's corporate supply row says tight DRAM/NAND conditions may persist beyond calendar 2026 [data_package Section 6, line 242]. If that tightness is especially acute in CDBU's data center SSD and server-memory channels, revenue visibility and margins could be better than the historical commodity cycle suggests.

Summary table

Case	Segment TTM+5y Revenue	Segment TTM+5y Op Margin	Segment TTM+5y Op Income	Probability
Bear	$13.85B	18.1%	$2.51B	25%
Base	$23.32B	35.0%	$8.17B	55%
Bull	$32.61B	42.1%	$13.72B	20%

Data flags inserted: [DATA FLAG: dispatch label says Cloud Memory Business Unit (CDBU), but Micron defines CDBU as Core Data Center Business Unit and CMBU as Cloud Memory Business Unit; this appendix models CDBU.] [DATA GAP: no product dollar series] for data center SSD/data center NAND and enterprise/OEM server memory within CDBU; [DATA GAP: management does not provide a full CDBU product revenue guide, data center SSD annual revenue guide, or FY+5 CDBU operating margin target in the data package.] These are not minor formatting gaps. They are the main reason the product split is explicitly labeled as a model allocation rather than a disclosed historical fact.

Appendix B4 - AEBU

Automotive and Embedded Business Unit (AEBU) - Segment Deep Dive

Source protocol and modeling anchor

This appendix covers only Micron Technology, Inc.'s Automotive and Embedded Business Unit (AEBU). Historical Micron dollar figures, growth rates, margins, and management commentary are taken from `data_package.md` and `quant_foundation.md`, which are the source of record for this ER2 run. I did not use local warehouse cache data. B-prefixed live source files retained for this appendix are `raw/B-AEBU-FMP-profile-MU.json`, `raw/B-AEBU-FMP-revenue-product-segmentation-annual-MU.json`, `raw/B-AEBU-FMP-revenue-product-segmentation-quarter-MU.json`, `raw/B-AEBU-SEC-10K-FY2025-mu-20250828.htm`, `raw/B-AEBU-SEC-10Q-FQ2-2026-mu-20260226.htm`, and `raw/B-AEBU-Micron-IR-FQ2-2026-release.html`.

The time anchor is the Stage 0 convention: today is 2026-04-29; Micron's fiscal year is the 52/53-week year ending on the Thursday closest to August 31; the latest quarter is Q2 FY2026 ended February 26, 2026; TTM is Q3 FY2025 plus Q4 FY2025 plus Q1 FY2026 plus Q2 FY2026; and the forward horizon is exactly February 26, 2031, five calendar years after the TTM end date. The TTM anchor for AEBU is $6.989 billion of revenue, $2.727 billion of operating income, and a 39.0% operating margin from QF P4. [quant_foundation.md P4, lines 142-149]

0. Segment boundary + taxonomy note

AEBU is a current reportable segment created under Micron's FY2025 market-segment reorganization. The taxonomy break is hard: FY2023 through FY2025 are available in the new CMBU/CDBU/MCBU/AEBU structure because the FY2025 10-K retrospectively adjusted prior periods, while FY2021 and FY2022 remain in legacy CNBU/MBU/EBU/SBU form and are not comparable by segment. [data_package.md Section 1, lines 63-75; Section 3, lines 110-160] For this appendix, all dollar comparisons use only the FY2023-FY2025 current taxonomy plus the QF TTM bridge. Legacy EBU or SBU data are mentioned only as a reminder of what not to splice into AEBU.

1. What this segment actually is

AEBU is Micron's memory and storage franchise for automotive, industrial, and consumer embedded markets. The formal reportable-segment description is memory and storage solutions for automotive, industrial, and consumer segments. [data_package.md Section 1, row AEBU, line 71; quant_foundation.md P-Taxonomy, line 106] Practically, the segment sells DRAM, NAND, managed NAND, NOR, SSDs, multi-chip packages, and related embedded memory solutions into environments where qualification, reliability, supply continuity, thermal behavior, safety certification, and long product lives matter more than in many consumer electronics cycles.

The automotive side serves OEMs, tier-one suppliers, autonomous-driving platforms, infotainment and cockpit systems, advanced driver-assistance systems, telematics, electric-vehicle control systems, and future robotics-like mobility platforms. The product mix is not disclosed in dollars, but the use cases imply a mix of LPDDR/DRAM for compute, NAND or managed NAND for code and data storage, NOR for reliable boot and execute-in-place functions, and UFS/embedded storage for higher-bandwidth automotive applications. The industrial side serves factory automation, aerospace and defense, edge networking, surveillance, machine-to-machine systems, and robotics. The consumer embedded side includes durable embedded applications outside PCs and phones, including connected home, networking, and small-form-factor systems where Micron's NOR, NAND, and lower-power DRAM offerings are relevant.

Pricing is mostly component and system-solution pricing, negotiated with OEMs, tier suppliers, distributors, and embedded-system customers. It is not software-like recurring revenue. The revenue model is wafer and package output converted into bits, devices, modules, or storage solutions, priced by density, performance, grade, qualification status, and market tightness. The go-to-market combines direct sales to strategic customers, distributor channels for broad industrial and embedded demand, and customer-specific qualification programs. Automotive qualification cycles are long, so design wins can create durable sockets, but the ultimate economics remain semiconductor economics: unit content grows, bits per wafer improve, and price cycles can dominate short-term margins.

AEBU is not a pure automotive company and is not simply Micron's legacy Embedded Business Unit. It now combines automotive, industrial, and consumer embedded under the FY2025 reorganization. The data package explicitly states that automotive and industrial together exceeded $2 billion of revenue in Q2 FY2026, but annual submarket dollars are not disclosed. [data_package.md guardrail row AEBU, line 57; Section 4 row AEBU, line 211] That matters because the segment's forward model should not pretend to know whether automotive is 55%, 65%, or 75% of current AEBU revenue. The correct analytical treatment is to model the reportable segment, then describe the submarket drivers qualitatively.

2. Current economics (FY2025 and TTM)

FY2025 AEBU revenue was $4.753 billion, operating income was $557 million, and operating margin was 11.7%. In the FY2025 segment expense table, AEBU had $3.566 billion of cost of goods sold, $435 million of R&D, and $195 million of SG&A. That implies FY2025 gross profit of $1.187 billion, a 25.0% gross margin, R&D at 9.2% of revenue, SG&A at 4.1% of revenue, and operating income at 11.7% of revenue. [quant_foundation.md P2, lines 71-79; data_package.md Section 3, lines 136-142]

The TTM picture is much stronger because the memory cycle and AEBU pricing improved sharply after FY2025. The QF TTM bridge gives AEBU FY2025 revenue of $4.753 billion, subtracts FY2025 H1 revenue of $2.192 billion, adds FY2026 H1 revenue of $4.428 billion, and arrives at $6.989 billion of TTM revenue. TTM operating income is $2.727 billion, for a 39.0% operating margin. [quant_foundation.md P4, lines 142-149] This is not a normal steady-state margin assumption. It is a cycle-up anchor driven by tight DRAM/NAND supply, better pricing, and mix. It is still the right modeling base because the Stage 0 convention requires exactly five-year compounding from TTM ending February 26, 2026.

Recent quarters show the severity of the step-up. Data package Section 5 lists AEBU revenue at about $1.16 billion in Q3 FY2025, $1.40 billion in Q4 FY2025, $1.70 billion in Q1 FY2026, and $2.70 billion in Q2 FY2026. The Q3 FY2025 row is derived and approximate because standalone current-taxonomy segment revenue was not separately released before the Q4 reorganization. The Q4, Q1, and Q2 rows are rounded disclosures from the calls and releases. [data_package.md Section 5, lines 223-228] Gross margin disclosures moved from 31% in Q4 FY2025 to 45% in Q1 FY2026 and 68% in Q2 FY2026, with Q2 AEBU revenue up 57% sequentially, driven by higher pricing, partially offset by lower bit shipments. [data_package.md Section 5, lines 226-228]

The product and sub-segment picture is intentionally limited. Data package Section 4 says Micron does not disclose automotive DRAM, industrial, consumer embedded, or other AEBU product-family revenue as full historical dollar series. The finest regularly dollar-disclosed product view is company-wide technology revenue: DRAM, NAND, and Other primarily NOR. Those technology categories cross several reportable segments and cannot be allocated to AEBU without fabrication. [data_package.md Section 4, lines 197-212; quant_foundation.md P-Taxonomy, lines 107-109] Therefore, current AEBU economics must be read at segment level, with product drivers described but not dollarized.

3. Unit economics

AEBU's unit economics start with wafer supply and process technology. Micron turns DRAM, NAND, and NOR wafer output into automotive- and industrial-grade devices, modules, managed NAND, SSDs, and embedded packages. Revenue per bit depends on technology node, density, endurance, power, bandwidth, qualification status, and supply-demand balance. Gross profit is the spread between average selling price and manufacturing cost per bit or per device. Operating income then subtracts segment R&D and SG&A, including product engineering, qualification work, customer support, safety and reliability requirements, and sales coverage for fragmented industrial channels.

The FY2025 cost structure shows why margins can be volatile. AEBU's FY2025 gross margin was about 25.0%, R&D consumed 9.2% of revenue, SG&A consumed 4.1%, and operating margin was 11.7%. [quant_foundation.md P2, line 76] In Q2 FY2026, AEBU gross margin was disclosed at 68%, a huge increase from 45% in Q1 and 31% in Q4. [data_package.md Section 5, lines 226-228] The main short-term driver was not a sudden collapse in R&D needs; it was pricing. The Q2 call summary in the data package says AEBU revenue rose sequentially because of higher pricing, partially offset by lower bit shipments. [data_package.md Section 5, line 228] When ASP lifts faster than unit cost, semiconductor operating leverage is dramatic because the fixed cost base of fabs, engineering, and sales coverage is already in place.

The medium-term margin question is whether the Q2 FY2026 pricing environment is a new structural floor or a cyclical peak. AEBU has better structural features than commodity consumer DRAM because automotive and industrial designs require qualification, endurance, supply continuity, and customer confidence. Automotive-grade LPDDR and UFS products are not one-quarter spot commodities. A design win can last across a vehicle platform's life. Industrial equipment can have long replacement cycles and conservative supplier qualification. Those features support premium pricing and lower churn.

However, the underlying memory products are still exposed to global DRAM/NAND supply. Micron's own competitive section warns that competitors can use aggressive pricing and that new supply, including China-linked DRAM and NAND capacity, can pressure the market. [B-AEBU-SEC-10K-FY2025-mu-20250828.htm, Competitive Conditions excerpt]

The most important margin driver is therefore not only AEBU-specific mix but corporate supply discipline and cross-market allocation. Data center HBM and server DRAM currently absorb leading-edge capacity and raise the opportunity cost of non-data-center bits. That can support AEBU pricing, especially for customers who need long-term continuity. But if data center demand cools or competitors add enough supply to weaken DRAM/NAND pricing, AEBU gross margin can compress quickly. AEBU's high current margin should be normalized down in the base case, not assumed to persist unchanged for five years.

R&D reinvestment is another constraint. Automotive and industrial products need long life, broad temperature support, functional safety, firmware and controller work for storage solutions, and customer-specific validation. Management highlighted automotive-grade 1-gamma LPDDR5 DRAM samples and G9-based UFS 4.1 automotive storage as technology leadership points on the Q2 FY2026 call dated 2026-03-18. [data_package.md Section 6, row AEBU automotive, line 242; raw/D-FMP-transcript-FY2026-Q2.json] Those products should help mix and ASP, but they also require ongoing product development. The base case assumes segment operating margin fades from 39.0% TTM to 31.0% at the horizon: still strong versus FY2025, but no longer at the Q2 FY2026 peak implied by a 68% gross margin.

4. Competitive dynamics

AEBU competes inside the broader semiconductor memory and storage market. The FY2025 10-K's competitive section names Samsung Electronics, SK hynix, Kioxia, Sandisk, CXMT, and YMTC as memory and storage competitors, and notes that competitors may use aggressive pricing to gain share. It also warns that some competitors have greater scale, resources, and different cost or government-support structures. [B-AEBU-SEC-10K-FY2025-mu-20250828.htm, Competitive Conditions excerpt] For AEBU specifically, the relevant competitive sets differ by product. In DRAM and LPDDR for automotive compute, Samsung and SK hynix are the primary global-scale competitors. In NAND, managed NAND, UFS, and SSD-like embedded storage, Samsung, Kioxia/Sandisk, SK hynix/Solidigm, and China-linked entrants can matter. In NOR and specialty embedded memory, competition can include narrower specialty players as well as broad memory suppliers.

Micron's segment-level advantage is not monopoly share. It is qualification depth, product breadth, process execution, and customer trust. Automotive customers care about long-term availability, reliability, safety, and roadmap fit. Industrial customers care about endurance, supply continuity, and conservative validation. These buyer requirements create friction against rapid switching, especially once memory is qualified into a platform. Management's Q1 FY2026 call statement that AEBU was seeing strong demand in ASIL-rated LPDDR5X and UFS 4.1 NAND products, with billions of dollars in design wins, is relevant because ASIL and automotive-grade products require more than commodity spot supply. [data_package.md Section 4, line 198; raw/D-FMP-transcript-FY2026-Q1.json, call date 2025-12-17]

The pricing power picture is mixed. In the current environment, Micron has clear pricing power because supply is tight across DRAM and NAND and customers need secure supply. Management has said supply-demand tightness should persist beyond calendar 2026, and the Q2 AEBU revenue and gross-margin improvement confirms that AEBU benefited from this environment. [data_package.md Section 6, line 245; Section 5, line 228] Yet AEBU does not control its own independent supply curve. Data center HBM, server DRAM, and high-value NAND pull capacity away from lower-return markets. That helps AEBU when capacity is scarce, but if industry wafer additions overshoot or if AI demand disappoints, the same shared supply curve can pressure AEBU.

Substitution risk is lower in the core automotive and industrial use cases than in consumer devices because reliability and qualification requirements are high. The risk is not that a vehicle stops needing DRAM, NAND, or NOR. It is that OEMs select a competitor's qualified solution, reduce memory content to protect bill of materials, delay autonomy features, or push suppliers for concessions if vehicle affordability becomes strained. Consumer embedded is more price elastic and less protected. The segment's moat is therefore strongest in automotive and industrial design wins, weaker in broad consumer embedded and low-density commodity products, and highly dependent on Micron preserving technology leadership and customer quality.

5. Moat at the segment level

AEBU has a real but moderate moat. The moat is not a network effect, brand lock-in, or software ecosystem. It is a qualification and execution moat built on process technology, reliability, customer relationships, product breadth, and long product cycles. Automotive-grade memory must operate across wide temperature ranges, handle safety requirements,

maintain reliability over long service lives, and fit OEM roadmaps that take years to qualify. Industrial and aerospace/defense customers also tend to value continuity and reliability over the lowest short-term spot price. Those characteristics reduce churn once Micron wins a socket.

The moat is stronger because the segment can draw on Micron's full corporate manufacturing platform. AEBU benefits from leading DRAM and NAND nodes, the G9 NAND ramp, 1-gamma DRAM, and corporate quality systems. Management said a clear majority of customers rank Micron number one in quality in Q2 FY2026, which is meaningful for automotive and industrial customers even though it is a company-wide statement. [raw/D-FMP-transcript-FY2026-Q2.json, call date 2026-03-18] The segment also benefits from portfolio breadth: DRAM, LPDDR, NAND, managed NAND, NOR, SSD storage, and multi-chip packages allow Micron to meet more of a customer's memory/storage bill rather than compete for a single component.

The moat is not impregnable. Memory remains a scale business with fierce global competition. The 10-K competitive section is blunt that competitors can use aggressive pricing and that new entrants or government-supported capacity can harm Micron's competitive position. [B-AEBU-SEC-10K-FY2025-mu-20250828.htm, Competitive Conditions excerpt] In a downcycle, AEBU's qualification moat may slow share loss but cannot prevent ASP compression if comparable qualified supply is abundant. It also does not fully protect consumer embedded, where buyer switching costs and content growth are weaker than in automotive ADAS or factory automation.

Durability over five to ten years depends on automotive content growth and industrial autonomy. Management's AEBU comments point to a long runway: current cars with less than L2 ADAS have about 16GB of DRAM, while L4 autonomy requires over 300GB; industrial demand is linked to factory automation, aerospace/defense, robotics, edge networking, and surveillance; robotics is framed as a 20-year growth vector. [data_package.md Section 6, lines 242-244] Those are not near-term dollar guarantees, but they support a durable content-growth thesis. The base-case moat conclusion is that AEBU can earn above-commodity margins through the cycle, but current TTM margin embeds cycle conditions that should not be extrapolated unchanged.

6. Historical growth rates - reproduced from data package, not re-derived

The current AEBU taxonomy has only FY2023, FY2024, and FY2025 annual history. The "3 fiscal-year displayed period CAGR" below is the CAGR from FY2023 to FY2025 over two annual intervals. I do not splice FY2021-FY2022 legacy EBU/SBU data into AEBU. [data_package.md Section 1, lines 63-75; Section 3, lines 136-142]

Product / sub-segment	FY2023 rev	FY2024 rev	FY2025 rev	3 fiscal-year displayed period CAGR	Most recent YoY	Data package cite
AEBU reportable segment: automotive, industrial, and consumer embedded	$4.14B	$4.63B	$4.75B	7.2%	2.6% in FY2025	`data_package.md` Section 3 AEBU current-taxonomy rows, lines 136-142
Automotive and industrial submarkets	n/d	n/d	n/d	n/m	n/d annually; Q2 FY2026 combined revenue exceeded $2B	`data_package.md` Section 4 AEBU row, lines 206-212; Section 6 row AEBU automotive, line 242
Consumer embedded	n/d	n/d	n/d	n/m	n/d	[DATA GAP: Micron does not disclose consumer embedded revenue as a separate annual dollar series in the data package.]
AEBU DRAM / NAND / NOR product mix	n/d	n/d	n/d	n/m	n/d	[DATA GAP: DRAM, NAND, and Other/NOR are disclosed only as company-wide technology revenue, not allocated to AEBU.]

Internal arithmetic check: FY2023 AEBU revenue of $4.14B multiplied by 1.119 equals $4.63B within rounding, matching FY2024. FY2024 revenue of $4.63B multiplied by 1.026 equals $4.75B within rounding, matching FY2025. The two-interval CAGR from $4.14B to $4.75B is about 7.2%. The arithmetic satisfies the 2% tie-out rule. No back-solved submarket dollars are used.

The annual history understates the current run-rate because FY2026 H1 rose sharply. QF P4 bridges AEBU from FY2025 revenue of $4.753B, less FY2025 H1 revenue of $2.192B, plus FY2026 H1 revenue of $4.428B, to TTM revenue of $6.989B. [quant_foundation.md P4, line 149] This means the forward model starts from a TTM level 47.0% above FY2025 annual

revenue, even though the comparable annual FY2025 YoY was only 2.6%. The model must therefore explicitly decide how much of the FY2026 H1 surge is structural content growth and how much is cyclical pricing.

7. Management guidance - quoted from data package Section 6

Segment / topic	Data package row	Verbatim excerpt	Interpretation
AEBU / automotive	Section 6 row AEBU automotive, line 242	"over 300GB"	Management's automotive thesis is content growth. The gap between current average vehicle DRAM content and L4 autonomy content supports long-duration growth, but adoption pace and auto affordability determine timing.
AEBU / industrial	Section 6 row AEBU industrial, line 243	"Long-term demand trends"	Industrial demand is framed as a durable automation, defense, robotics, networking, and surveillance cycle rather than a one-quarter rebound.
AEBU / robotics	Section 6 row AEBU robotics, line 244	"20-year growth vector"	Robotics is an upside option for AEBU, especially if robot compute platforms resemble high-end autonomous vehicles in memory/storage needs. It is not yet separately dollar-disclosed.
Corporate supply	Section 6 row Corporate supply, line 245	"beyond calendar 2026"	Tight DRAM/NAND supply is a segment margin anchor. It supports high AEBU pricing in the near term, but the base case assumes some normalization by 2031.
Corporate capital intensity	Section 6 row Corporate capital intensity, line 246	"above $25 billion"	Micron is adding capacity aggressively. This helps meet long-term demand but also introduces oversupply risk if demand forecasts weaken.

Management commentary is positive for AEBU, but it is not a full FY+1 segment guide. [DATA GAP: The data package does not provide a specific FY2026 AEBU revenue guide, AEBU operating income guide, automotive revenue guide, industrial revenue guide, or consumer embedded revenue guide.] The available guidance is directional: automotive and industrial demand is strengthening; AEBU pricing improved; autonomous vehicles and robotics increase memory content; and corporate supply should remain tight beyond CY2026. The model uses that guidance as a qualitative constraint rather than a point forecast.

8. Forward growth assumptions - explicit, per product, justified

Because Micron does not disclose AEBU submarket or product-family revenue in annual dollars, the only modelable revenue line is the AEBU reportable segment. Automotive, industrial, robotics, and consumer embedded are treated as internal drivers of that segment line, not as separate dollar rows. This is a deliberate anti-fabrication choice. [data_package.md Section 4, lines 197-212; Section 10, lines 277-279]

Base-case growth assumes AEBU revenue compounds at 8.0% from the $6.989B TTM anchor to $10.27B at February 26, 2031. That is slightly above the FY2023-FY2025 displayed-period CAGR of 7.2%, but far below the FY2026 H1 surge. The reason is that the base case gives credit for automotive content growth, industrial automation, robotics optionality, and longer-duration design wins, while normalizing the extreme Q2 FY2026 pricing uplift. It also recognizes that some DRAM/NAND supply will be allocated to data center because the industry TAM is shifting toward AI servers. AEBU benefits from scarcity, but it may not receive the highest incremental bit allocation if data center returns remain superior.

Product / sub-segment	3 fiscal-year displayed period CAGR	Latest YoY / recent trend	Mgmt FY+1 guide	Base CAGR TTM to TTM+5y	Justification
AEBU reportable segment	7.2% from FY2023-FY2025	FY2026 H1 revenue of $4.428B versus FY2025 H1 subtraction base of $2.192B in QF TTM bridge; Q2 FY2026 revenue up 57% sequentially	No explicit FY2026 segment guide; management cites automotive content, industrial demand, robotics, and tight supply	8.0%	Base growth is a normalized content CAGR, not a continuation of the pricing spike. Automotive ADAS and industrial autonomy support above-GDP growth, while consumer embedded and eventual supply response cap the trajectory.

Bull-case growth assumes AEBU revenue compounds at 13.0%, reaching $12.88B. The bull case requires three things at once: automotive memory content ramps faster as L2+ ADAS becomes standard across broader fleets; industrial/robotics

demand becomes a material high-content category before 2031; and tight DRAM/NAND supply persists long enough for Micron to keep pricing and mix favorable. The bull case is not simply "Q2 FY2026 forever." It still decelerates sharply from the FY2026 H1 run-rate because Q2 included a pricing shock. The upside is that automotive and industrial customers may sign longer supply commitments and accept premium pricing for continuity.

Product / sub-segment	3 fiscal-year displayed period CAGR	Latest YoY / recent trend	Mgmt FY+1 guide	Bull CAGR TTM to TTM+5y	Justification
AEBU reportable segment	7.2% from FY2023-FY2025	Record Q2 FY2026 AEBU revenue; automotive and industrial together exceeded $2B in the quarter	Directionally positive, with "over 300GB" L4 autonomy content and robotics as a "20-year growth vector"	13.0%	Bull assumes content growth and supply scarcity remain mutually reinforcing. Automotive-grade LPDDR/UFS wins, industrial robotics, and long-term supply agreements keep AEBU growing well above its pre-surge history.

Bear-case growth assumes AEBU revenue compounds at 2.0%, reaching $7.72B. The bear case does not require revenue collapse because the TTM base is already high and automotive/industrial design wins create some stickiness. It does require a meaningful reversal of current pricing power. If memory supply expands faster than demand, if vehicle autonomy adoption is slower, if industrial automation budgets weaken, or if consumer embedded customers reduce memory configurations to manage cost, AEBU could give back much of the FY2026 pricing benefit. China-linked capacity also matters: not necessarily because it immediately wins automotive-grade sockets, but because broader commodity pressure lowers the pricing umbrella.

Product / sub-segment	3 fiscal-year displayed period CAGR	Latest YoY / recent trend	Mgmt FY+1 guide	Bear CAGR TTM to TTM+5y	Justification
AEBU reportable segment	7.2% from FY2023-FY2025	FY2025 latest annual YoY only 2.6%; Q2 FY2026 surge was pricing-led with lower bit shipments	No explicit FY2026 segment guide	2.0%	Bear assumes cycle normalization overwhelms content growth. Automotive and industrial remain durable, but ASP declines, consumer embedded elasticity, and competitive supply additions reduce realized revenue growth.

Thesis-consistency check: the base case decelerates from the FY2026 H1 surge to 8.0% annualized over five years. That is defensible because the latest annual comparable period before the TTM surge grew only 2.6%, while the TTM surge was heavily pricing-led. The bull case still does not extrapolate Q2's sequential 57% revenue growth; it treats Q2 as evidence of pricing power and content demand, then normalizes to 13.0%. The bear case is below the FY2023-FY2025 displayed-period CAGR because memory cycles can erase ASP-driven gains, but it remains positive because AEBU has content growth and design-win stickiness.

9. Forward operating margin assumptions - explicit and justified

Current AEBU TTM operating margin is 39.0%. FY2025 margin was 11.7%. Recent gross margins were 31% in Q4 FY2025, 45% in Q1 FY2026, and 68% in Q2 FY2026. [quant_foundation.md P4, line 149; data_package.md Section 3, lines 136-142; Section 5, lines 226-228] The gap between FY2025 operating margin and TTM operating margin is too large to treat as a stable trend. The right question is where AEBU margins settle after a five-year period that includes both structural content growth and new capacity additions.

Base-case horizon operating margin is 31.0%. This is 800 bps below current TTM but still far above FY2025's 11.7%. The mechanism is ASP normalization and rising R&D, partly offset by mix improvement, scale leverage, and more automotive/industrial content. AEBU should have better structural margins than broad consumer memory because automotive and industrial qualifications matter and because advanced autonomy raises DRAM/NAND content. However, Micron is investing heavily in capacity, including new cleanroom projects, and a five-year view should include some risk that industry supply catches up. The base case therefore models AEBU as a high-quality memory segment, not as a permanent Q2 FY2026 peak-margin business.

Bull-case horizon operating margin is 38.0%. This roughly preserves the current TTM margin and assumes tight supply lasts longer than normal, design-win pricing remains strong, automotive and industrial mix improves, and supply agreements provide better visibility. The bull case does not raise margin above the TTM level because competitive memory markets rarely sustain peak margins indefinitely, and Micron's large capex program should eventually add supply. It simply assumes the structural value of memory in automotive autonomy and robotics keeps AEBU from reverting to historical trough margins.

Bear-case horizon operating margin is 18.0%. This is above FY2025 but far below the TTM anchor. The mechanism is broad DRAM/NAND ASP pressure, lower pricing in consumer embedded and lower-density applications, slower vehicle autonomy adoption, and more competition from large global memory suppliers and China-linked entrants. AEBU's qualification moat prevents a collapse to commodity trough economics in the base of installed programs, but it does not protect against a memory downcycle. R&D and customer-support expense also become heavier relative to revenue if pricing falls.

Product / sub-segment	Current OI margin	Bear TTM+5y OI margin	Base TTM+5y OI margin	Bull TTM+5y OI margin	Margin mechanism
AEBU reportable segment	39.0% TTM	18.0%	31.0%	38.0%	Bear: ASP compression and competitive supply; Base: partial price normalization plus automotive/industrial mix; Bull: sustained scarcity, design wins, and high-value auto/industrial content.

No product-level margin split is provided because Micron does not disclose AEBU product revenue or operating income by automotive, industrial, consumer embedded, DRAM, NAND, or NOR. [DATA GAP: Product-level AEBU margin is not disclosed in the data package.] A revenue-weighted average by invented product lines would look precise but would be less reliable than the segment-level table above.

10. Segment rollup - bottoms-up arithmetic must tie

The rollup has one model line: AEBU reportable segment. That is the finest disclosed revenue line suitable for dollar modeling. It ties mechanically to the segment revenue and margin assumptions above. The formula is:

TTM+5 revenue = $6.989B TTM revenue x (1 + scenario CAGR)^5.

TTM+5 operating income = TTM+5 revenue x scenario operating margin.

Case	Model line	TTM revenue	CAGR to Feb. 26, 2031	TTM+5y revenue	TTM+5y op margin	TTM+5y op income	Tie status
Bear	AEBU reportable segment	$6.989B	2.0%	$7.72B	18.0%	$1.39B	Revenue and OI tie to single modeled line
Base	AEBU reportable segment	$6.989B	8.0%	$10.27B	31.0%	$3.18B	Revenue and OI tie to single modeled line
Bull	AEBU reportable segment	$6.989B	13.0%	$12.88B	38.0%	$4.89B	Revenue and OI tie to single modeled line

The base case adds $3.28B of revenue over five years, which is plausible if automotive and industrial content growth continues but memory pricing normalizes. The bull case adds $5.89B and requires a much stronger autonomy/robotics ramp plus sustained tight supply. The bear case adds only $0.73B from the TTM base, effectively assuming that content growth is largely offset by price normalization.

The rollup does not allocate revenue across automotive, industrial, and consumer embedded. Doing so would require an undisclosed current split and would violate the data package guardrail. The appendix therefore gives the synthesis agent a clean segment forecast and explicit qualitative drivers, not false precision.

11. Key risks and wildcards

Bear risk - ASP normalization and oversupply. AEBU margins are currently elevated by tight DRAM/NAND supply. If greenfield capacity, node transitions, or competitors' wafer additions arrive faster than demand, pricing can fall even if automotive memory content grows. The 10-K explicitly warns about aggressive pricing, competitor scale, and government-supported new entrants. [B-AEBU-SEC-10K-FY2025-mu-20250828.htm, Competitive Conditions excerpt]

Bear risk - auto adoption timing. Management's "over 300GB" L4 autonomy reference is powerful, but L4 autonomy penetration by 2031 is uncertain. A long content runway does not guarantee a steep five-year revenue ramp if OEMs prioritize affordability, regulation slows deployment, or autonomy moves more slowly than expected.

Bear/Base risk - customer concentration and allocation. Micron's top ten customers have represented about half of revenue in recent years, and AEBU competes internally for supply with data center products. If data center returns stay much higher, AEBU could receive constrained bit allocation even as demand exists.

Base risk - high current TTM margin distorts the starting point. The TTM margin of 39.0% includes Q1/Q2 FY2026 pricing strength. If the main model treats that as normal, it will overstate FY+5 operating income. This appendix normalizes base margin to 31.0% to avoid that mistake.

Bull wildcard - robotics becomes a real category sooner. Management called robotics a "20-year growth vector" and linked humanoid robots to high-end L4-capable automotive compute platforms. If robotics design wins become material before 2031, AEBU growth could exceed the base case without requiring unrealistic vehicle autonomy penetration.

Bull wildcard - strategic customer agreements broaden beyond data center. Q2 commentary says Micron signed a five-year strategic customer agreement and is discussing similar commitments across markets. If automotive and industrial customers participate meaningfully, AEBU could gain better price visibility and supply-linked returns.

Bear/Base risk - China and geopolitical restrictions. The 10-K discusses China-related restrictions and competitive threats from China-linked memory entrants. AEBU may be less exposed than generic consumer memory in safety-critical products, but broader market pricing and customer access can still be affected.

Summary table

Case	Segment TTM+5y Revenue	Segment TTM+5y Op Margin	Segment TTM+5y Op Income	Probability
Bear	$7.72B	18.0%	$1.39B	25%
Base	$10.27B	31.0%	$3.18B	50%
Bull	$12.88B	38.0%	$4.89B	25%

The 50% base probability reflects a favorable but cyclical setup: recent AEBU quarterly revenue and gross margin support a strong starting point, while FY2025's 2.6% annual growth and the Q2 FY2026 pricing-led surge argue against making the bull case the default. The 25% bull weight is reserved for faster ADAS/robotics content growth plus sustained supply tightness. The 25% bear weight reflects memory-cycle normalization, new supply, and consumer embedded elasticity, partly offset by automotive and industrial design-win stickiness.

Data gaps and flags inserted

- [DATA GAP: Micron does not disclose consumer embedded revenue as a separate annual dollar series in the data package.]
- [DATA GAP: DRAM, NAND, and Other/NOR are disclosed only as company-wide technology revenue, not allocated to AEBU.]
- [DATA GAP: The data package does not provide a specific FY2026 AEBU revenue guide, AEBU operating income guide, automotive revenue guide, industrial revenue guide, or consumer embedded revenue guide.]
- [DATA GAP: Product-level AEBU margin is not disclosed in the data package.]
- The Q3 FY2025 current-taxonomy AEBU quarterly revenue row is approximate/derived per the data package, not a separately released standalone current-taxonomy quarter.

Appendix S - Synthesis (Combined Earnings Model)

Micron Technology, Inc. - Synthesis (Combined Earnings Model)

1. Anchors

This synthesis uses the Stage 0 anchor supplied for the Micron ER2 Production Mode run. It does not move the right edge of the model to the last fiscal year, and it does not stretch the compounding span beyond five calendar years.

Anchor	Value
Today	2026-04-29
Company fiscal year convention	52/53-week fiscal year ending on the Thursday closest to August 31
Most recent quarter	Q2 FY2026, ended February 26, 2026
TTM anchor	Q3 FY2025 + Q4 FY2025 + Q1 FY2026 + Q2 FY2026
TTM end date	February 26, 2026
Latest completed FY label for historical tie-out	FY2025, ended August 28, 2025
Horizon date	February 26, 2031
Compounding span	Exactly 5.0 calendar years from the TTM end date
Current price	$504.29, live FMP quote saved to S-FMP-quote-MU-2026-04-29.json
TTM diluted share count	1,142 million shares from Q2 FY2026 in quant_foundation P6

The controlling TTM financial base comes from quant_foundation P4. Consolidated TTM revenue is $58.119 billion, operating income is $28.094 billion, and net income is $24.111 billion. Current reportable segment TTM revenue is $20.962 billion for CMBU, $11.173 billion for CDBU, $18.981 billion for MCBU, and $6.989 billion for AEBU. These four modeled segments sum to $58.105 billion of revenue. The remaining $0.014 billion is All Other. Segment operating income before unallocated expense is $29.319 billion including the tiny All Other line. Unallocated expense is negative $1.225 billion, which reconciles segment operating income to consolidated TTM operating income of $28.094 billion.

The model is intentionally built from the reviewed segment appendices rather than from a fresh product segmentation reconstruction. Micron's FY2025 reporting reorganization created a current CMBU/CDBU/MCBU/AEBU taxonomy, but HBM, data center SSD, automotive, PC, and mobile product dollars are not separately disclosed as full historical series. The synthesis therefore respects the appendices' anti-fabrication guardrails: where a segment appendix uses product/modeling lines, those lines are marked as model allocations, and where product dollars are not disclosed the synthesis does not invent a finer split.

2. Segment-Level Forward Assumptions

The table below reproduces the segment handoff assumptions from the reviewed B appendices. The "TTM+5y" endpoint is February 26, 2031, not a fiscal-year-plus-six endpoint. Revenue and operating income are in USD billions.

Segment	TTM revenue	Bear TTM+5y revenue	Base TTM+5y revenue	Bull TTM+5y revenue	Bear OI margin	Base OI margin	Bull OI margin	Source
CMBU, Cloud Memory Business Unit	$20.962	$39.653	$53.782	$72.864	45.8%	54.0%	60.6%	appendix_B_compute_and_networking_business_unit.md Sections 8-10
CDBU, Core Data Center Business Unit	$11.173	$13.850	$23.320	$32.610	18.1%	35.0%	42.1%	appendix_B_cloud_memory_business_unit.md Sections 8-10
MCBU, Mobile and Client Business Unit	$18.981	$16.300	$26.620	$31.980	22.0%	38.0%	45.0%	appendix_B_mobile_and_client_business_unit.md Sections 8-10
AEBU, Automotive and Embedded Business Unit	$6.989	$7.720	$10.270	$12.880	18.0%	31.0%	38.0%	appendix_B_automotive_and_embedded_business_unit.md Sections 8-10

The segment cases are not uniform in probability or risk. CMBU is the largest swing factor because the base case assumes HBM and hyperscale cloud memory remain structurally tight while still fading from the Q2 FY2026 peak. CDBU is also high-beta because the Q2 FY2026 data center SSD and server-memory step-up is recent, large, and not supported by a long disclosed product-dollar history. MCBU is the key normalization risk: the TTM base is far above FY2025 and current margin is near peak-cycle economics. AEBU is the most durable but smallest of the four modeled lines, with automotive and industrial content growth offset by memory-cycle pricing risk.

The CMBU appendix splits the segment into non-HBM hyperscale cloud memory, HBM for data-center customers, and an other/residual line. Those are forward modeling lines, not company-disclosed historical product series. The CDBU appendix splits the segment into data center SSD/data center NAND storage and enterprise/OEM server memory plus component NAND. Those are also model allocations because Micron does not disclose a complete annual data center SSD dollar series. MCBU and AEBU remain single reportable-segment lines because the data package does not disclose PC versus mobile or automotive versus industrial revenue in sufficient detail. This matters for tie-out Checks 4 and 5: product rollups exist only where the relevant B appendix deliberately created model lines.

3. Combined Revenue Build

Revenue is built by summing the four reviewed segment appendices, then adding an immaterial All Other line. There are no corporate revenue eliminations in the Micron data package. Quant foundation P4 reports All Other TTM revenue of $0.014 billion. The horizon model carries that line at $0.020 billion in all three cases because it is immaterial and not a strategic driver.

Line	Bear	Base	Bull
CMBU TTM+5y revenue	$39.653	$53.782	$72.864
CDBU TTM+5y revenue	$13.850	$23.320	$32.610
MCBU TTM+5y revenue	$16.300	$26.620	$31.980
AEBU TTM+5y revenue	$7.720	$10.270	$12.880
Sum of modeled segment revenue	$77.523	$113.992	$150.334
All Other / corporate revenue	$0.020	$0.020	$0.020
Corporate eliminations	$0.000	$0.000	$0.000
Combined TTM+5y revenue	$77.543	$114.012	$150.354
Implied TTM to TTM+5y CAGR	5.9%	14.4%	20.9%

The base case almost doubles consolidated revenue from the $58.119 billion TTM base to $114.012 billion at the February 26, 2031 horizon. That looks aggressive in isolation, but the shape is concentrated: CMBU contributes $32.820 billion of the $55.893 billion consolidated revenue increase, CDBU contributes $12.147 billion, MCBU contributes $7.639 billion, and AEBU contributes $3.281 billion. In other words, the base case is primarily an AI memory and data-center storage case, not a broad assumption that every Micron end-market grows at the same rate.

The bear case still grows revenue to $77.543 billion. That is because even a normalized memory cycle can leave the company larger than the TTM base if AI servers, high-bandwidth memory, and data center SSDs keep taking capital. The bear case is not a recession or severe oversupply case; it is a normalization case where HBM grows but loses scarcity pricing, CDBU grows slower, MCBU gives back some TTM revenue, and AEBU grows modestly. A true memory downcycle could fall below this bear case.

The bull case reaches $150.354 billion. It requires sustained HBM scarcity, Micron roadmap parity or leadership across HBM4/HBM4E, durable data-center SSD demand, and a broader AI-client content uplift. It is not used for the P/E 15 gate. It exists to size the upside if memory remains a strategic constraint for large customers and industry supply additions are absorbed without a major price break.

4. Combined Operating Income Build

Operating income uses the segment operating income handoffs from the B appendices and an explicit unallocated corporate expense bridge. Quant foundation P4 shows TTM unallocated operating income of negative $1.225 billion. The model grows that expense at 3.0% per year for five years, producing negative $1.420 billion at the horizon. This is conservative relative to a pure fixed-cost assumption, and it recognizes that Micron's expanded manufacturing footprint, CHIPS compliance, advanced packaging, and global support structure should require higher corporate overhead even if most cost is held inside segments.

All Other operating income was $0.002 billion in the TTM bridge. It is carried at zero at the horizon because it is immaterial and not separately forecastable.

Line	Bear	Base	Bull
CMBU operating income	$18.149	$29.036	$44.167
CDBU operating income	$2.510	$8.170	$13.720
MCBU operating income	$3.590	$10.120	$14.390
AEBU operating income	$1.390	$3.180	$4.890
Sum of modeled segment OI	$25.639	$50.506	$77.167
All Other OI	$0.000	$0.000	$0.000
Unallocated corporate expense	($1.420)	($1.420)	($1.420)
Combined TTM+5y OI	$24.219	$49.086	$75.747
Implied OI margin	31.2%	43.1%	50.4%

The base case operating margin of 43.1% is below the 48.3% TTM margin reported in quant_foundation P4. That is deliberate. TTM margin includes Q1 and Q2 FY2026, when memory pricing, supply tightness, and HBM/data-center mix were exceptionally favorable. The base case assumes that five-year revenue growth is real, but it also assumes the company gives back about 520 basis points of consolidated operating margin as new capacity comes online, depreciation rises, and customers regain some bargaining power. The result is still a much better earnings base than FY2025 because the product mix is more data-center heavy and because CMBU is much larger.

The bear case consolidated margin of 31.2% is still above FY2025's 26.1% because the model gives some credit for AI memory and automotive/industrial content. It is far below TTM because MCBU, CDBU, and CMBU all normalize. The bull case margin of 50.4% is only slightly above TTM, despite much higher revenue, because the model does not assume operating leverage is unlimited. Capex and depreciation catch up even in the bull case.

5. Net Income and EPS Build

The TTM income statement bridge is close to operating income. The live FMP quarterly income pull saved as S-FMP-income-statement-quarter-MU-2026-04-29.json shows recent non-operating items around neutral to slightly negative over the TTM period, while quant_foundation P4 gives official TTM operating income and net income. For the horizon model, I use negative $0.250 billion of net interest and other expense in all cases. That is a small drag, consistent with the latest net-cash position in quant_foundation P6 but also with the risk that a larger capex plan absorbs cash or requires some debt funding.

The tax rate assumption is 13.0% in all cases. That is close to the FY2025 tax rate used in the data package ROIC table and above a simple low-tax-cycle assumption. The Q2 FY2026 quarter had a higher tax rate, but a five-year normalized model should not treat one quarter as permanent. A 13.0% rate is therefore a middle ground: not a tax holiday, and not a punitive stress case.

Line	Bear	Base	Bull
Combined TTM+5y OI	$24.219	$49.086	$75.747
Net interest and other income / expense	($0.250)	($0.250)	($0.250)
Pre-tax income	$23.969	$48.836	$75.497
Tax rate assumed	13.0%	13.0%	13.0%
Net income	$20.853	$42.487	$65.682
Diluted share count at TTM+5y	1,146.2M	1,146.2M	1,146.2M
EPS at TTM+5y	$18.19	$37.07	$57.30

The base case EPS is $37.07. At the current price of $504.29, the required FY+5 EPS for a P/E of 15 is $33.62. Base case EPS therefore clears the formal P/E 15 bar by $3.45 per share, or 10.3%. This is a pass on the arithmetic gate, but it is not a wide-margin pass for a cyclical memory company. A small miss in CMBU growth, MCBU margin, share count, or tax can erase a meaningful part of the cushion.

6. Share Count Path

The share count path starts with 1,142 million diluted shares from Q2 FY2026. The cash-flow pull saved as S-FMP-cash-flow-statement-quarter-MU-2026-04-29.json reports TTM stock-based compensation of $1.114 billion across Q3 FY2025, Q4 FY2025, Q1 FY2026, and Q2 FY2026. Using the current FMP quote price of $504.29, that equates to roughly 2.21 million shares of annual SBC issuance.

Forward buybacks are not assumed to be aggressive. Data package Section 7 shows buybacks of $1.20 billion in FY2021, $2.43 billion in FY2022, $0.42 billion in FY2023, $0.30 billion in FY2024, and zero in FY2025. Recent corporate actions show Q1 FY2026 and Q2 FY2026 repurchases of $300 million and $350 million, while management prioritized capex, balance sheet strength, dividends, and only then repurchases. The forward model therefore assumes $0.75 billion of annual buybacks at an average repurchase price of $550.00. That retires 1.36 million shares per year, which is less than modeled SBC issuance. Diluted shares drift upward slightly.

Year	Starting share count	Buyback dollars	Avg price assumed	Shares retired	SBC issuance	Ending share count
Year 1	1,142.0M	$0.75B	$550	1.36M	2.21M	1,142.8M
Year 2	1,142.8M	$0.75B	$550	1.36M	2.21M	1,143.7M
Year 3	1,143.7M	$0.75B	$550	1.36M	2.21M	1,144.5M
Year 4	1,144.5M	$0.75B	$550	1.36M	2.21M	1,145.4M
Year 5	1,145.4M	$0.75B	$550	1.36M	2.21M	1,146.2M

This path is intentionally not a buybacks-maintain-EPS shortcut. Micron is entering a high-capex period. The management appendix says the company is funding the AI-era manufacturing expansion from strength, but the right priority order is organic investment, balance sheet strength, dividend growth, and then buybacks. Under that logic, repurchases should not be modeled as a major EPS lever unless free cash flow remains very high after capex and debt reduction. The model gives modest buyback credit but does not let buybacks rescue the P/E test.

7. P/E 15 Test

Case	EPS at TTM+5y	EPS x 15	Current price	Cushion	Pass?
Bear	$18.19	$272.89	$504.29	-45.9%	Fail
Base	$37.07	$556.01	$504.29	+10.3%	Pass, thin
Bull	$57.30	$859.55	$504.29	+70.4%	Pass

The base case is the only case that matters for the formal Gideon P/E 15 gate. The bull case cannot rescue the thesis if the base case fails. Here, the base case clears the test: $37.07 of FY+5 EPS times 15 equals $556.01, above the current price of $504.29. The cushion is only 10.3%, so I would not describe the valuation conclusion as robust. It depends heavily on CMBU revenue and margin durability, and it assumes that Micron's current AI memory cycle is not merely a one-year spike.

The bear case fails badly. At $18.19 of EPS, a 15x multiple supports only $272.89. That is the outcome if HBM grows but pricing normalizes hard, if CDBU loses shortage pricing, if MCBU reverts toward consumer-memory economics, and if AEBU remains too small to offset the damage. The bear case is not an extreme collapse, which is the important point: a normalizing memory cycle can break the valuation.

8. Reflexivity Check

The TTM reconstruction ties at the consolidated level. Quant foundation P4 reports $58.119 billion of consolidated TTM revenue. The four modeled segments sum to $58.105 billion, and All Other adds $0.014 billion, matching consolidated revenue within rounding. Quant foundation P4 reports $28.094 billion of consolidated TTM operating income. The four modeled segments sum to $29.317 billion, All Other adds $0.002 billion, and unallocated operating income is negative $1.225 billion, matching consolidated operating income.

Latest completed FY2025 also ties. Data package Section 3 gives FY2025 segment revenue of $13.524 billion for CMBU, $7.229 billion for CDBU, $11.859 billion for MCBU, $4.753 billion for AEBU, $0.013 billion for All Other, and zero revenue for unallocated. The sum is $37.378 billion, which matches data package Section 2 consolidated FY2025 revenue. Segment operating income is $6.13 billion for CMBU, $2.18 billion for CDBU, $1.98 billion for MCBU, $0.56 billion for AEBU, approximately zero for All Other, and negative $1.08 billion for unallocated, matching the official FY2025 consolidated operating income of $9.770 billion within rounding. This is the anchor that prevents the forward build from compounding off a mismapped taxonomy.

The reflexivity risk is not a current arithmetic break. It is the time-shape of the forecast. The combined base case revenue CAGR is 14.4%, but the TTM period already includes a very large Q2 FY2026 step-up. If the first forward year mechanically compounds at the five-year CAGR, revenue starts more than 10% above the TTM base. That fails the strict recency check unless the model explicitly treats the current Q2 run-rate as evidence that the TTM average is lagging the exit rate. I flag this in Tie-out Check 9 rather than smoothing it away. The base case is not fabricated, but it has a recency-risk yellow flag.

9. In-Progress FY Reconciliation

Stage 0 does not treat FY2026 as complete. The model anchors on TTM ending February 26, 2026, not on a projected FY2026. The in-progress FY reconciliation is still useful because the TTM includes FY2026 H1, and Q2 FY2026 was unusually strong.

Data package Section 5 reports consolidated quarterly revenue of $13.64 billion in Q1 FY2026 and $23.86 billion in Q2 FY2026. FY2026 H1 revenue is therefore $37.50 billion. Q1 operating income was $6.136 billion and Q2 operating income was $16.135 billion, giving FY2026 H1 operating income of $22.271 billion. Annualizing H1 would produce $75.0 billion of revenue and $44.5 billion of operating income. Annualizing Q2 alone would produce $95.4 billion of revenue and $64.5 billion of operating income.

Those run-rates explain why a $114.0 billion base-case horizon revenue is not purely disconnected from current results. It is only 20% above Q2 annualized revenue, despite being 96% above TTM revenue. The risk is that Q2 is a peak pricing quarter and not a sustainable exit rate. The segment appendices handle that by fading margins in base case: CMBU base margin is below current TTM, CDBU base margin is far below current TTM, MCBU base margin fades by more than 1,000 basis points, and AEBU base margin fades by 800 basis points. Revenue growth still assumes that a material part of the AI memory step-up persists.

10. Sensitivity

The table below holds the base case constant except for the named variable. EPS impacts are approximate and use the 13.0% tax rate and 1,146.2 million horizon share count.

Variable changed	Downside case	Base	Upside case	EPS impact
CMBU revenue CAGR	Base CMBU CAGR minus 200 bps	20.7% implied	Base CMBU CAGR plus 200 bps	-$1.77 / +$1.89
CDBU terminal OI margin	33.0%	35.0%	37.0%	-$0.35 / +$0.35
Share count	5% higher shares	1,146.2M	5% lower shares	EPS $35.30 / $39.02
Tax rate	16.0%	13.0%	10.0%	EPS $35.79 / $38.35

CMBU revenue and share count are the largest of these simple sensitivities. CMBU matters because it carries both the largest revenue increase and the highest margin. A 200 bp change in CMBU CAGR moves EPS by almost $2 per share even before considering that lower growth might also compress margin. Share count matters because Micron's price is high in the model period and buybacks are not assumed to overwhelm SBC. Tax is meaningful but secondary. CDBU margin matters, but a 200 bp margin move there is smaller than CMBU growth because CDBU is less than half CMBU's base-case horizon revenue.

The more realistic downside is correlated. If HBM pricing normalizes, CMBU revenue CAGR, CMBU margin, CDBU margin, and MCBU margin likely all weaken together. That is why the bear case is much lower than any one-variable sensitivity. The base case passes the P/E test, but the sensitivity table shows that the cushion can disappear without requiring a disaster.

11. Combined Earnings Summary

Case	Revenue	OI	OI margin	NI	EPS	Probability	EPS x 15	vs. $504.29
Bear	$77.543B	$24.219B	31.2%	$20.853B	$18.19	25%	$272.89	-45.9%
Base	$114.012B	$49.086B	43.1%	$42.487B	$37.07	50%	$556.01	+10.3%
Bull	$150.354B	$75.747B	50.4%	$65.682B	$57.30	25%	$859.55	+70.4%
Probability-weighted EPS	n/a	n/a	n/a	n/a	$37.95	100%	$569.25	+12.9%

The probability weights are 25% bear, 50% base, and 25% bull. That distribution reflects a strong current AI memory cycle and management execution, but it avoids giving the bull case equal standing with the base because memory remains cyclical

and capex is rising. The bear probability is also not trivial: the data package and management appendix both show a company that can swing from severe losses to very high margins within a few years.

The base case headline is: FY+5 revenue of $114.012 billion, operating income of $49.086 billion, net income of $42.487 billion, and EPS of $37.07. Against a current price of $504.29, the required FY+5 EPS for a P/E of 15 is $33.62. The base case cushion is 10.3%.

Tie-Out Checks

- **Reported-financial tie-out, TTM plus latest completed FY: PASSED.** TTM revenue ties to $58.119 billion after adding All Other to the four modeled segments. TTM OI ties to $28.094 billion after adding All Other and subtracting $1.225 billion of unallocated expense. FY2025 revenue and OI also tie to the data package and quant foundation segment tables within rounding.

- **NI / shares = EPS: PASSED.** Bear net income of $20.853 billion divided by 1,146.2 million shares equals $18.19. Base net income of $42.487 billion divided by 1,146.2 million shares equals $37.07. Bull net income of $65.682 billion divided by 1,146.2 million shares equals $57.30.

- **Segment sum tie-out at horizon: PASSED.** The four modeled segment appendices sum to $77.523 billion, $113.992 billion, and $150.334 billion of bear/base/bull revenue. The synthesis adds only $0.020 billion of All Other revenue and no eliminations. The adjustment is less than 0.1% in all cases, well inside the 1% tolerance.

- **Product-to-segment rollup: PASSED WITH DISCLOSURE LIMITATIONS.** CMBU product/modeling lines sum to the CMBU segment totals in all three cases. CDBU product/modeling lines sum to the CDBU segment totals in all three cases. MCBU and AEBU are single reportable-segment lines because product dollars are not disclosed; their rollups tie by construction. This is a pass because the appendices explicitly identify the data gaps rather than fabricating product histories.

- **Weighted margin check: PASSED.** CMBU margins are revenue-weighted from product/modeling-line OI and revenue, with base OI of $29.036 billion on $53.782 billion of revenue, or 54.0%. CDBU margins are revenue-weighted, with base OI of $8.17 billion on $23.32 billion of revenue, or 35.0%. MCBU and AEBU are single-line segment models, so the weighted average equals the segment margin by construction.

- **Share count path: PASSED.** Starting diluted shares of 1,142.0 million plus five years of 2.21 million annual SBC issuance minus five years of 1.36 million annual buyback retirement equals 1,146.2 million ending shares. The path uses exactly five years.

- **Growth plausibility: PASSED WITH CYCLICAL WARNING.** CMBU base CAGR is high at about 20.7%, but the CMBU appendix justifies it with HBM, cloud AI memory, sold-out CY2026 volume/pricing, and a much larger HBM TAM. CDBU base CAGR of 15.9% is below the segment's FY2023-FY2025 current-taxonomy recovery CAGR and is supported by data center SSD/storage demand. MCBU base CAGR of 7.0% is far below its recovery CAGR. AEBU base CAGR of 8.0% is slightly above its displayed-period CAGR but tied to automotive/industrial content. The warning is that historical current-taxonomy data are only FY2023-FY2025 and begin near a trough.

- **Historical arithmetic: PASSED.** The B appendices compute each endpoint using TTM revenue times one plus CAGR to the fifth power. Examples: MCBU base is $18.981 billion times 1.07^5, or $26.62 billion; AEBU base is $6.989 billion times 1.08^5, or $10.27 billion; CDBU base product lines sum to $23.32 billion; CMBU base product lines sum to $53.782 billion. Differences are rounding only.

- **Recency anchor: FAILED / FLAGGED.** A straight base-case five-year revenue CAGR from $58.119 billion to $114.012 billion implies a first-forward-year revenue step of about 14.4%, above the strict 10% tolerance versus TTM. This is partly mitigated by Q2 FY2026 annualized revenue of $95.4 billion, but the check is written against the most recent four-quarter run-rate, not a single-quarter exit rate. The model is usable only with a clear flag that it assumes a material part of the Q2 FY2026 step-up persists.

- **Capital intensity consistency: PASSED.** The management appendix and data package both state that FY2026 capex is expected above $25 billion and FY2027 construction-related capex is expected to increase by more than $10 billion year over year. The base case's revenue expansion is therefore directionally consistent with management's aggressive capacity plan. The pass is not a free-cash-flow endorsement; it only confirms that the revenue model is not assuming growth without capex.

- **P/E 15 arithmetic: PASSED, THIN CUSHION.** Current price is $504.29. Required FY+5 EPS for P/E 15 is $33.62. Base-case EPS is $37.07, giving a 10.3% cushion. Bear fails and bull passes. The valuation gate is cleared, but the margin of safety is narrow for a cyclical memory business.

Synthesis Conclusion

Micron's base case clears the formal P/E 15 test, but the conclusion is fragile. The company has become a much larger AI memory earnings engine than its FY2023 trough suggested, and the reviewed segment appendices support a real five-year growth path led by CMBU and CDBU. However, the stock price already capitalizes much of that transition. At $504.29, the model needs at least $33.62 of FY+5 EPS to satisfy a 15x multiple. The base case produces $37.07, only 10.3% above the hurdle.

The most important number is CMBU's base case, not the consolidated total by itself. If HBM and hyperscale cloud memory remain allocation-constrained and Micron holds qualified roadmap positions, CMBU can plausibly reach more than $50 billion of horizon revenue at a mid-50s operating margin. If HBM normalizes faster, customers regain pricing leverage, or a competitor wins a major platform generation, the base-case EPS cushion can disappear. MCBU normalization is the second major risk because current TTM margin is far above historical client/mobile memory economics. CDBU is the third because data center SSD momentum is real but product-level dollars are not fully disclosed.

Tie-out status is 10/11 passed, with Check 9 failed/flagged on the strict recency-anchor test. The failure does not mean the arithmetic is broken. It means the base case assumes the recent Q2 FY2026 step-up is a genuine run-rate inflection rather than a one-quarter peak. That assumption is exactly what the main report should underwrite or reject.

Appendix CS - Compounder Score

Micron Technology, Inc. - Compounder Score

Analysis date: 2026-05-28 Ticker: MU Exchange: NASDAQ Currency: USD TTM anchor: Q3 FY2025 + Q4 FY2025 + Q1 FY2026 + Q2 FY2026, ending February 26, 2026 Forward horizon: February 26, 2031

1. Executive Verdict

Micron receives a diagnostic Compounder Score of 48 / 100: Business Quality 48 / 80 and 20% Return Underwriting 0 / 20. The score-implied classification is Reject under this rubric. This is not an ER2 gate and does not mechanically override the ER2 BUY / WATCH / PASS verdict. It says something narrower: the evidence does not support treating MU at the refreshed quote as a high-confidence quality compounder capable of 20% annualized shareholder returns without heroic valuation assumptions.

The business is clearly better positioned than it was in the FY2023 memory trough. The verified ER2 files show TTM revenue of $58.119B, TTM operating income of $28.094B, TTM net income of $24.111B, TTM operating cash flow of $30.653B, and TTM adjusted free cash flow of $13.558B. CMBU and CDBU have become large AI-memory and data-center engines, management is executing credibly, and the balance sheet moved toward net cash by Q2 FY2026. That supports a positive business-quality score.

The cap is equally important. The local data package shows five-year annual ROIC of 14.6%, 19.4%, -10.1%, 2.0%, and 15.7% from FY2021 through FY2025. That is not a stable >20% ROIC compounder pattern. The current TTM is exceptional, but Micron's own moat appendix calls the moat YELLOW because memory remains cyclical, customers retain bargaining power, and current pricing power is unusually favorable. The synthesis also flags Check 9 because the base case assumes a meaningful part of Q2 FY2026's run-rate persists.

The valuation score is zero. A live FMP quote pulled for this scoring pass showed MU at $943.875, with market cap about $1.064T. Using the synthesis base-case FY+5 EPS of $37.07 and a 15x exit multiple gives a February 2031 value of $556.01 per share, a negative annualized return from the refreshed quote. Even the synthesis bull-case value of $859.55 at 15x EPS is below the refreshed quote. A 20% annualized five-year return from $943.875 would require ending value near $2,349 per share, or about 63x the synthesis base-case FY+5 EPS. That requires major terminal multiple support and fails the rubric.

2. Data Source Map

Data item	Source used	Confidence	Notes
Current price and market cap	Live FMP quote endpoint, pulled 2026-05-28	Medium	Price $943.875; market cap about $1.064T. No API key printed or written.
TTM financial base	quant_foundation.md P4/P6	High	Revenue $58.119B, OI $28.094B, NI $24.111B, CFO $30.653B, adjusted FCF $13.558B.
Historical annual financials	data_package.md Sections 4 and 7	High	FY2021-FY2025 revenue, OI, capex, FCF, ROIC, R&D, buybacks, dividends.
Segment economics	quant_foundation.md, data_package.md, B appendices, synthesis	Medium-high	Current taxonomy exists only FY2023-FY2025; product-level HBM/SSD dollars are incomplete.
Management	appendix_management.md	Medium-high	Management gate PASS, but with Chair/CEO, insider selling, capex, and cyclicality flags.
Moat	appendix_moat.md	Medium	Moat gate YELLOW and 2046 test YELLOW.
Valuation model	appendix_synthesis.md plus refreshed quote	Medium	Synthesis used $504.29; this CS refresh uses $943.875 and keeps FY+5 cases unchanged.
Red-team evidence	appendix_red_team.md	Medium-high	Red team calls the thesis narrow and sensitive to CMBU scarcity economics.

3. Key Financial and Quality Metrics

Metric	Value	Evidence / formula
FY2021-FY2025 revenue CAGR	7.8%	$27.70B to $37.38B over four years.
FY2021-FY2025 NOPAT CAGR	10.0%	$5.89B to $8.63B, but with FY2023/FY2024 trough volatility.
FY2021-FY2025 FCF CAGR	-9.0%	$2.44B to $1.67B annual FCF; capex intensity absorbs cash.
Five-year median reported ROIC	14.6%	Median of 14.6%, 19.4%, -10.1%, 2.0%, 15.7%.
TTM adjusted FCF / NOPAT	55.5%	$13.558B adjusted FCF / $24.442B normalized TTM NOPAT.
TTM FMP FCF / NOPAT	42.1%	$10.281B FMP FCF / $24.442B normalized TTM NOPAT.
FY2025 net debt / EBITDA	0.30x	data_package.md balance sheet snapshot.
Latest net debt	Net cash under Q2 FY2026 convention	quant_foundation.md P6 shows net debt of negative $1.742B.
Current EV / TTM NOPAT	43.3x	Market cap $1.064T + debt $10.798B - cash/investments $16.653B; NOPAT $24.442B.
Adjusted FCF yield	1.3%	$13.558B / $1.064T market cap.
FMP FCF yield	1.0%	$10.281B / $1.064T market cap.
Latest SBC / revenue	1.9%	$1.114B TTM SBC / $58.119B TTM revenue.
Latest SBC / adjusted FCF	8.2%	$1.114B / $13.558B.
FY2021-FY2025 share count CAGR	-0.4%	1,141M to 1,125M; dilution not an abuse, but buybacks are not a major EPS engine.

The evidence supports a company with strong current earnings power, not a clean through-cycle compounding machine. The annual ROIC series includes two strong years, one severe loss year, one weak recovery year, and a FY2025 rebound. The TTM result is much stronger than FY2025, but this scoring rubric gives limited credit to peak-cycle or scarcity-cycle returns unless the evidence proves they can be redeployed at similarly high incremental returns through the next cycle.

ROIIC is scored conservatively. A mechanical FY2023-to-TTM calculation would look extraordinary because FY2023 was a trough with negative operating income. That is not useful evidence of durable incremental return on capital. A FY2021/FY2022-to-FY2025 comparison is cleaner through-cycle context and does not show a high ROIIC company: NOPAT ended FY2025 close to FY2022 while capex, R&D, and invested capital rose materially. Therefore ROIIC is marked insufficient / cycle-distorted rather than high.

4. Rubric Scorecard

Category	Score	Max	Rationale
Incremental returns on capital	12	25	Current returns are excellent, but five-year median ROIC is only 14.6% and ROIIC is not clean through-cycle evidence.
Reinvestment runway	14	20	AI memory, HBM, data-center SSDs, automotive/industrial memory, and high capex create a real runway. Oversupply risk caps the score.
Durability of moat	9	15	Scale, process know-how, packaging, customer qualification, and trusted supply are real; moat and 2046 tests are YELLOW.
Accounting and financial quality	7	10	U.S. filing quality, reconciled ER2 data, net-cash latest position, and modest SBC support quality; FCF is volatile and product disclosure is limited.
Capital allocation discipline	6	10	Management has acted rationally, but capex timing risk is large and buyback discipline is not exceptional.
Price and 20% return underwriting	0	20	Base, bear, and bull cases at 15x FY+5 EPS fail to produce a positive five-year return from the refreshed price.
Total	48	100	Reject under diagnostic CS rubric.

Category detail

1A. Normalized ROIC is high: 2 / 5. The five-year median reported ROIC is 14.6%, below the 15% threshold after a severe trough and weak recovery year. FY2025 was 15.7% and the TTM is much stronger, but the record is not stable enough for a high score.

1B. ROIIC is high: 2 / 8. Insufficient clean evidence. Trough-to-peak incremental returns are not durable ROIIC evidence. Through-cycle evidence is mixed because NOPAT did not compound consistently while capex and invested capital rose.

1C. ROIIC is not deteriorating sharply: 1 / 3. The current direction is sharply better, but the data are dominated by a cycle turn rather than a smooth reinvestment curve.

1D. Unit economics support reported returns: 2 / 3. CMBU and CDBU current margins are strong and tied to real HBM/data-center demand. MCBU's current TTM margin is too high to treat as normalized.

1E. Cash conversion is real: 2 / 3. TTM CFO and adjusted FCF are strong, but FY2021-FY2025 annual FCF was weak relative to earnings because capex is structurally heavy.

1F. ROIC is not an accounting artifact: 3 / 3. The denominator is not artificially tiny; the issue is cyclicality, not fake invested capital.

2A. Large remaining market opportunity: 4 / 5. AI memory, HBM, high-capacity DRAM, data-center SSDs, automotive, industrial, and edge AI create a large opportunity. TAM detail is incomplete at product-dollar level.

2B. Proven ability to reinvest at scale: 3 / 5. Micron can deploy tens of billions, but scale investment can also create future oversupply.

2C. Organic growth opportunity: 3 / 4. The runway is mostly organic around technology nodes, packaging, and fabs.

2D. Repeatable expansion playbook: 2 / 3. Management's supply discipline and HBM execution help, but the playbook is not software-like or asset-light.

2E. Market structure supports long growth: 1 / 2. Memory is oligopolistic, but customers and competing suppliers still pressure returns.

2F. Growth does not require ROIC collapse: 1 / 1. The model is at least directionally capex-consistent and does not pretend growth is free.

3A. Clear source of advantage: 3 / 4. Scale manufacturing, process know-how, packaging, and qualification are clear.

3B. Pricing power: 1 / 3. Pricing power is visible today but not proven permanent; the moat appendix explicitly warns about market-condition renegotiation.

3C. Competitive evidence: 2 / 3. Segment margins and HBM qualification support real advantage, but Samsung, SK hynix, and China-supported entrants remain serious.

3D. Customer stickiness: 1 / 2. Qualification costs matter, especially in HBM and automotive, but large customers can multi-source over time.

3E. Resilience through stress: 1 / 2. Micron survived the downturn, but FY2023 was a severe earnings stress.

3F. Low disruption risk: 1 / 1. AI raises memory intensity rather than replacing memory; the risk is value capture and supply, not product obsolescence.

4A. Clean revenue and earnings quality: 2 / 2. No major accounting red flag was found in the ER2 stack.

4B. Cash flow supports earnings: 1 / 2. TTM cash flow supports earnings; annual FCF history is structurally capital-intensive.

4C. Conservative treatment of SBC and dilution: 1 / 2. SBC is manageable, but it is a real cost and forward shares drift slightly upward in the synthesis.

4D. Balance sheet strength: 2 / 2. Latest net-cash position and debt reduction support the score.

4E. Transparent disclosures: 0.5 / 1. U.S. filings are detailed, but HBM and SSD product dollars remain insufficient.

4F. No governance/accounting red flags: 0.5 / 1. No hard fail, but combined Chair/CEO and broad insider selling are monitoring items.

5A. Reinvestment priority is rational: 2 / 2. Organic AI-era capacity and R&D are the right priorities if demand persists.

5B. Acquisition discipline: 1 / 2. No serial M&A issue; Tongluo is a capacity/timing bet requiring monitoring.

5C. Buyback discipline: 1 / 2. Buybacks have been residual and constrained, not obviously value-maximizing.

5D. Incentives align with value creation: 1 / 2. HBM3E+, data-center SSD, and relative TSR links are useful, but some targets are not externally auditable.

5E. Owner mentality: 0.5 / 1. Executive ownership is meaningful, though insider selling tempers the signal.

5F. Evidence from past decisions: 0.5 / 1. Downturn discipline was good; the next capex cycle is still unproven.

5. ROIIC and Reinvestment Analysis

The evidence does not support a high ROIIC score. The FY2021-FY2025 annual data show revenue rising from $27.70B to $37.38B, NOPAT from $5.89B to $8.63B, capex totaling $54.03B, and R&D totaling $16.12B. The endpoint NOPAT growth is real but modest relative to cumulative reinvestment. A three-year FY2023-to-FY2026-style calculation would be misleading because FY2023 was a trough with negative NOPAT and because the TTM includes a very strong Q2 FY2026 upcycle.

Micron's reinvestment is also not discretionary in the way it is for a high-margin software or payments compounder. The data package shows capex of $10.03B, $12.07B, $7.68B, $8.39B, and $15.86B from FY2021 through FY2025, and management guided FY2026 capex above $25B with FY2027 construction-related capex expected to increase by more than $10B year over year. That capex can create valuable capacity in HBM and advanced memory, but it can also arrive into weaker pricing. Under this rubric, growth is valuable only if incremental returns remain above the cost of capital after supply normalizes.

The best evidence for future ROIIC is CMBU. The synthesis base case assumes CMBU grows from $20.962B TTM revenue to $53.782B by the horizon, with operating income of $29.036B and a 54.0% base-case margin. That is a large value-creation engine if HBM scarcity and customer qualification persist. The weakest evidence is that Micron does not disclose a full long-run HBM dollar history, strategic customer agreement economics are undisclosed, and competing suppliers can add capacity or qualify next-generation products.

6. Runway Analysis

Micron's runway score is the strongest part of the business-quality case. AI infrastructure needs more bandwidth, memory capacity, and storage close to compute. CMBU serves large hyperscale cloud customers and includes HBM for all data-center customers. CDBU serves data-center memory outside the largest hyperscalers and data-center storage for all data-center customers. AEBU has content growth in automotive, industrial, robotics, and embedded systems. MCBU has an AI PC and smartphone content option, though that segment is lower quality and more price-sensitive.

The runway is not scored as a clean 20 / 20 because it is capital-intensive and competitively reflexive. High prices invite capex. The red-team appendix states the bear case clearly: AI can increase memory demand in the most dangerous way for Micron, by inviting a capital cycle. If demand arrives one platform generation late or is lower than expected, the industry has more wafers, higher depreciation, and customers with bargaining leverage.

7. Moat Analysis

Micron's moat is real but not clean enough for a high durability score. The moat appendix defines the moat as scale, process, manufacturing, customer qualification, capital access, advanced packaging, and trusted supply. That is persuasive for CMBU and parts of CDBU. HBM and data-center products require roadmap alignment, qualification, reliability, packaging yield, and supply assurance. These are not trivial barriers.

The problem is that the moat is not a permanent pricing-power contract. Micron's FY2025 10-K evidence, as summarized in the moat appendix, says customers historically resisted long-term fixed-price purchase contracts and pricing terms are typically renegotiated with market conditions. Strategic customer agreements are positive, but their economics are not disclosed. Therefore the moat supports a better-than-commodity score, not a software-style score.

8. Accounting and Capital Allocation Analysis

Accounting quality is acceptable. The quant foundation passed 8 / 8 reconciliation checks, uses official SEC/IR values where FMP differs, and preserves data-source limitations. The data package flags the FY2025 operating-income discrepancy between FMP and official sources, preserves the FY2025 taxonomy break, and avoids mixing current and legacy segments. That supports a high confidence in the historical base.

Capital allocation is rational but not exceptional. Management cut capex in the downturn, preserved R&D, reduced debt in Q1 and Q2 FY2026, and prioritized organic investment before repurchases. That is the right order for a cyclical manufacturer entering a large AI-era build. The score is capped because the capex program itself is the largest forward risk. A good process can still destroy value if capacity arrives into a pricing rollover.

9. 20% Return Underwriting

Case	FY+5 EPS	15x value	Annualized return from $943.875	Score implication
Bear	$18.19	$272.89	-22.0%	Fails badly.
Base	$37.07	$556.01	-10.0%	Fails; no 20% case.
Bull	$57.30	$859.55	-1.9%	Still below refreshed quote at 15x.

The base case does not merely miss 20%; it is negative under a 15x exit multiple. At $943.875, the required FY+5 EPS for a 15x exit value equal to today's price is $62.93. The synthesis base case is $37.07 and the bull case is $57.30. To earn 20% annually over five years from the refreshed quote, the ending value must be about $2,349 per share. On base-case EPS, that implies roughly 63x FY+5 EPS. That is terminal multiple dependence, and the rubric gives no valuation credit for it.

The max buy price for a 20% annualized five-year return using the synthesis base case and a 15x exit multiple is about $223 per share before small dividends. A dividend yield near the current market price would not close the gap. Cash returns do not rescue the score because FCF yield is only about 1.0%-1.3% at the refreshed market cap and management is prioritizing capex.

10. Hard Veto Checklist

Veto	Status	Evidence
ROIIC below cost of capital or insufficient evidence	Watch	Clean ROIIC is insufficient; trough-to-peak math is not durable proof.
Reported ROIC high only because invested capital is tiny	Pass	Invested capital is substantial; cyclicality is the issue.
Growth requires persistent external financing	Pass	Latest balance sheet is strong and TTM cash generation is high.
Share count rises materially without value creation	Pass	Five-year share count declined slightly; forward drift is modest.
Large acquisitions without returns disclosure	Watch	No serial M&A issue, but Tongluo capacity acquisition needs monitoring.
FCF consistently lags earnings structurally	Watch	TTM FCF is strong; five-year annual FCF is weak due to capex intensity.
Concentration, cyclicality, or leverage can impair equity	Watch	Cyclicality and customer bargaining power are material.
20% return case requires terminal multiple expansion	Fail	Required return needs a much higher exit value than base/bull 15x cases support.
Company needs flawless execution at today's price	Fail	Refreshed price requires more than the synthesis bull at 15x.
Cannot explain moat in one paragraph	Pass	Moat is scale/process/packaging/qualification/trusted supply.
Governance/accounting issues impair trust	Watch	No hard issue; combined Chair/CEO and insider selling are yellow flags.
Balance sheet risk could wipe out equity	Pass	Latest balance sheet is not the binding risk.

11. Final Decision

Score-implied classification: Reject.

The evidence supports a better business than the old commodity-memory stereotype, but not a clean high-ROIIC compounder at the refreshed price. The business-quality score is capped by cyclicality, incomplete product-dollar disclosure, uncertain through-cycle ROIIC, a YELLOW moat, and a very large capex program. The return-underwriting score is zero because the refreshed price already exceeds the synthesis bull-case value at 15x FY+5 EPS.

Compounder Score note: 48 / 100; diagnostic Reject because valuation gets 0 / 20 and business quality is capped by cyclicality and insufficient clean ROIIC evidence.

Business Quality Score note: 48 / 80; AI memory runway and management execution are real, but through-cycle ROIC, moat durability, and capex reflexivity fall short of quality-compounder evidence.

20% Return UW Score note: 0 / 20; at $943.875, base-case 15x FY+5 value is $556.01 and even bull-case 15x value is $859.55, so the 20% case requires major terminal multiple support.

12. Machine-Readable JSON

See `compounder_score.json` in this folder for the machine-readable score.

Appendix CSA - Scoring Audit

Micron Technology, Inc. - Scoring Audit

Analysis date: 2026-05-28 Ticker: MU CSA scope: audited `appendix_compounder_score.md` and `compounder_score.json` against the ER2 source stack in this folder. No files outside this Micron folder were written.

1. Original vs Audited Scores

Item	Original	Audited	Notes
Business Quality Score / 80	48	38	Reduced for uncalculated ROIIC, thin through-cycle FCF conversion evidence, YELLOW moat, and short-cycle scarcity assumptions.
Valuation / 20% Return UW Score / 20	0	0	Preserved at zero; base, bear, and bull 15x FY+5 values fail the 20% hurdle at the refreshed quote.
Total Score / 100	48	38	Diagnostic Reject remains correct.
Classification	Reject	Reject	Below 70 and fails valuation, 20% hurdle, no-hard-veto, and ROIIC/runway thresholds.

Original reconstruction: the scorer used current price $943.875, market cap about $1.064T, base IRR -10.04%, bear IRR -21.98%, bull IRR -1.85%, and max buy price for a 20% five-year IRR of about $223.45 using base-case FY+5 EPS of $37.07 and a 15x exit multiple. The JSON and markdown agree on these major values.

Evidence control: this audit treats the verified ER2 stack as authoritative where the scorer depends on model outputs. `quant_foundation.md` anchors TTM to Q3 FY2025 through Q2 FY2026 ending February 26, 2026 and ties TTM revenue, operating income, net income, CFO, adjusted FCF, liquidity, and share count to official or reconciled sources. `data_package.md` supplies FY2021-FY2025 annual revenue, operating income, FCF, ROIC, capex, R&D, buybacks, dividends, and current-segment taxonomy cautions. `appendix_synthesis.md` supplies base, bear, and bull FY+5 EPS and the failed/flagged recency-anchor check. `appendix_moat.md`, `appendix_management.md`, and `appendix_red_team.md` supply the qualitative caps. Claims not grounded in those files are treated as lower-confidence even when directionally plausible.

2. Score Reductions and Reasons

This score is reduced because Category 1 gives 2 / 8 to ROIIC while the scorer explicitly says clean 3-year and 5-year ROIIC are not calculated and are cycle-distorted. Under CSA rules, if ROIIC is not calculated, Category 1B must be 0. I reduce incremental returns on capital from 12 / 25 to 8 / 25.

Runway is reduced from 14 / 20 to 12 / 20. AI memory, HBM, CDBU data-center SSDs, and automotive/embedded content are real opportunities, but the evidence base is strongest for near-term scarcity and management commentary, not a five-year proof of reinvestment at high normalized returns. The red-team appendix flags the exact issue: more AI memory demand can invite a capital cycle.

Moat is reduced from 9 / 15 to 7 / 15. The moat appendix is YELLOW and the 2046 test is YELLOW; customer qualification, scale, process learning, and packaging matter, but Micron does not have durable fixed-price protection and customers can renegotiate with market conditions.

Accounting and financial quality is reduced from 7 / 10 to 6 / 10 because cash conversion is not tested cleanly over at least three annual years in the scoring output. The scorer cites TTM adjusted FCF and annual FCF CAGR, but leaves `fcf_conversion_5yr` null in JSON. Capital allocation is reduced from 6 / 10 to 5 / 10 because the forward capex program is the central underwriting risk and the Tongluo site capacity acquisition is monitored but not return-tested.

3. Unsupported Claims

The evidence does not support a high-ROIIC conclusion. To the scorer's credit, it does not claim one, but it still awarded nonzero ROIIC points without a calculated 3-year, 5-year, or acquisition-inclusive ROIIC. That is an unsupported scoring choice.

The CMBU/HBM runway claim is partly supported, not fully supported. The ER2 files show HBM momentum, sold-out CY2026 commentary, and product qualification evidence, but they also state that Micron does not disclose a full HBM dollar history. The CMBU appendix allocates starting HBM revenue and compounds it at 28.0%; that can be plausible, but it is not primary-source product-dollar evidence.

The "balance sheet moved toward net cash" claim is supported by QF P6, but it should not do too much scoring work. The balance sheet is not the binding risk; future capex, depreciation, pricing normalization, and customer bargaining power are.

4. Calculation Errors

No major arithmetic error was found in the valuation mechanics. The base 15x value is $37.07 x 15 = $556.05 before rounding, consistent with the scorer's $556.01. The bear and bull values also tie directionally to the synthesis EPS cases. The base IRR from $943.875 to about $556 over five years is roughly -10.0%, and the 20% return endpoint is about $2,349 per share.

The calculation break is evidentiary, not arithmetic: ROIIC is marked null in the JSON, acquisition-inclusive ROIIC is null, reinvestment rate is null, and five-year FCF conversion is null. Those missing calculations require score caps even when the narrative qualitatively describes the issues.

5. Missing Data

The most important missing evidence is a clean through-cycle ROIIC bridge from incremental invested capital to incremental NOPAT. FY2023-to-TTM math is unusable because the start is a trough and the end contains a scarcity-cycle spike. FY2021/FY2022-to-FY2025 context is better, but the scorer does not compute a formal ROIIC percentage.

Other important gaps: product-level HBM dollar history, data-center SSD product-dollar history, strategic customer agreement economics, fixed-price or take-or-pay duration, acquisition-inclusive return evidence for Tongluo capacity, and a multi-year FCF conversion table using the same NOPAT/cash-flow definitions.

6. Hard-Veto and Threshold Test Audit

The original hard-veto treatment is mostly fair. The 20% return case requires terminal multiple expansion, and the current price exceeds the bull-case 15x FY+5 value. That is a fail, not a watch item. ROIIC evidence is insufficient, cyclicality/customer bargaining power remain material, and Check 9 in synthesis is failed/flagged because the base model assumes a material part of Q2 FY2026's run-rate persists.

The score-implied classification remains Reject. It fails total score >= 80, Business Quality >= 65, valuation score >= 15, ROIIC plus runway >= 35, base-case IRR >= 20%, bear-case IRR support, no-hard-veto, and no-multiple-expansion tests.

7. Final 20% Hurdle Pass/Fail

Final 20% hurdle: Fail. The 20% case requires an ending value near $2,349 per share from a $943.875 starting price. On base FY+5 EPS of $37.07, that implies roughly a 63x terminal P/E. The 15x base, bear, and bull cases do not clear; even bull value of about $859.55 is below the refreshed price.

8. Dream Business / Dream Investment Classification

Classification: neither. Micron is a much better positioned AI-memory business than in the old trough narrative, but it is not a dream business under the Gideon compounder bar because through-cycle ROIC, ROIIC, pricing power, and FCF conversion are not durable enough. It is not a dream investment because valuation underwriting scores 0 / 20.

9. Stage 7 Scorecard Notes

Compounder Score note: 38 / 100; diagnostic Reject because valuation scores zero and audited business quality is capped by uncalculated ROIIC, cyclicality, and missing product-dollar evidence.

Business Quality Score note: 38 / 80; AI-memory runway is real, but through-cycle ROIC, FCF conversion, capex reflexivity, and YELLOW moat evidence do not clear the quality-compounder bar.

20% Return UW Score note: 0 / 20; at $943.875, base and bull 15x FY+5 values are below the quote, so a 20% case requires major terminal multiple expansion.

10. Auditor JSON

See `compounder_score_audit.json` for the valid machine-readable audit.

Appendix RT - Red Team

Micron Technology, Inc. - Red Team

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Source discipline and anchor

This red-team appendix is written in Production Mode as of 2026-04-29. It uses the supplied Stage 0 anchor: Micron uses a 52/53-week fiscal year ending on the Thursday closest to August 31; the latest reported quarter is Q2 FY2026 ended February 26, 2026; TTM is Q3 FY2025 plus Q4 FY2025 plus Q1 FY2026 plus Q2 FY2026; the exact five-year horizon is February 26, 2031. I relied primarily on the verified appendices and synthesis as instructed: `appendix_synthesis.md`, the four segment appendices, `appendix_management.md`, `appendix_moat.md`, `data_package.md`, and `quant_foundation.md`. No cached warehouse data was used and no new non-approved sources were introduced by RT.

The red-team starting point is not that the model is arithmetically sloppy. The arithmetic is mostly clean. The problem is that the arithmetic is clean around a narrow thesis: at $504.29, base-case FY+5 EPS of $37.07 clears the P/E 15 hurdle by only 10.3%, and the synthesis itself reports Check 9 as FAILED / FLAGGED because the base forecast assumes a meaningful part of the Q2 FY2026 run-rate persists. That is the whole fight. If Q2 FY2026 is the new base of a strategic AI memory era, the stock can still work. If Q2 is peak scarcity pricing plus hyperscale panic buying, the base case is too high and the BUY case should be rejected.

1. The most fragile assumption

The most fragile assumption is the CMBU HBM and hyperscale cloud memory line in the Stage 5 model: CMBU grows from $20.962 billion of TTM revenue to $53.782 billion by February 26, 2031, with a 54.0% terminal operating margin. Inside that, the CMBU appendix allocates $8.8 billion of starting revenue to HBM for data-center customers and compounds that line at 28.0% to $30.237 billion, while non-HBM hyperscale cloud memory grows at 15.0% to $21.723 billion. The company does not disclose a historical HBM dollar series. The starting HBM and non-HBM splits are analyst allocations, not audited product lines.

This is fragile for four reasons. First, it carries the largest EPS weight. Base CMBU horizon operating income is $29.036 billion, versus $18.149 billion in the bear case. Holding all else equal, moving CMBU from base to bear removes $10.887 billion of operating income. After the 13.0% tax rate and 1,146.2 million horizon diluted shares, that is about $8.27 of EPS. Base EPS would fall from $37.07 to roughly $28.80, well below the $33.62 required for P/E 15 at the current price.

Second, the available history is not a full cycle. Current-taxonomy CMBU data exist only for FY2023-FY2025, and the path is from trough to boom: $1.87 billion in FY2023, $3.79 billion in FY2024, $13.52 billion in FY2025, then $20.962 billion TTM. That does not prove a stable 20.8% five-year CAGR from the elevated TTM base. It proves that Micron caught an extreme recovery and AI memory squeeze.

Third, management's support points are powerful but short dated. The data package records management describing HBM as a "strategic asset," saying CY2026 HBM volume/pricing was "sold out," and framing HBM TAM at "around $100 billion in 2028." Those comments are useful for FY2026-FY2028, not a guarantee that February 2031 still carries 54% CMBU operating margins. The model needs scarcity to last beyond the visible sold-out period.

Fourth, the very capex that supports the growth story can break the margin story. Data package Section 6 records FY2026 capex moving "above $25 billion" and Section 9 says FY2027 construction-related capex is expected to rise by more than $10 billion year over year. That is not merely a growth input. It is a future depreciation and supply input. If Micron, SK hynix, Samsung, and government-backed entrants all respond to the same HBM and data-center memory signal, the model may be right on bit demand and wrong on realized revenue and margin.

2. The most-likely-to-be-optimistic Stage 5 number

The single Stage 5 number most likely to be optimistic is the base-case consolidated operating margin of 43.1% at the February 26, 2031 horizon. It looks conservative versus the 48.3% TTM margin, but that comparison is misleading because TTM includes Q1 and Q2 FY2026, when pricing and mix were extraordinary. Q2 FY2026 alone showed consolidated revenue of $23.86 billion and GAAP operating margin of 67.6%. A five-year model should not treat the trailing twelve months as if they are mid-cycle.

The operating-margin optimism comes from multiple segments at once, not only CMBU. CMBU base margin is 54.0%, only 210 bps below the 56.1% TTM operating margin. MCBU base margin is 38.0%, far below the 49.7% TTM margin but still more than twice FY2025's 16.7%. AEBU base margin is 31.0%, versus FY2025's 11.7%. CDBU base margin is 35.0%, versus FY2025's 30.2% and a 48.3% TTM. The model does fade peak margins, but it still assumes the post-AI normalized cycle is structurally much higher than FY2025 in every large business.

That may be true. It is not robust enough for a clean BUY at only a 10.3% valuation cushion. The synthesis says a 200 bps lower CMBU CAGR alone costs $1.77 of EPS, but the realistic miss is correlated: lower HBM growth would probably arrive with lower HBM price, weaker CMBU margin, CDBU NAND/SSD normalization, and MCBU margin compression. The base-case margin therefore deserves more skepticism than the base-case revenue line. Revenue can remain structurally higher while profit pools move back to customers.

3. The strongest bear case, stated in its strongest form

Micron is being valued as if the AI memory shortage permanently rewires a historically cyclical commodity industry, but the evidence so far proves shortage, not permanence. The mechanism is straightforward: hyperscale and accelerator customers over-order strategic memory after being constrained in 2025-2026, suppliers build aggressively because current margins are extraordinary, and by 2028-2031 HBM, server DRAM, and data center NAND are still important but no longer scarce enough to support 40% plus consolidated operating margins. CMBU and CDBU suffer first through lower ASPs and customer renegotiation; MCBU follows because consumer OEMs will not pay peak-cycle memory prices for AI PCs and smartphones at mass-market volumes. The observable anchor is CMBU: if its revenue stops compounding from the Q2 FY2026 exit rate while margin falls below the mid-50s, the base EPS case breaks before the horizon.

The short-seller version would not argue that AI reduces memory demand. It would argue that AI increases memory demand in the most dangerous way for Micron: it invites a capital cycle. The data package already shows FY2026 capex above $25 billion and a further FY2027 construction step-up. If demand is 20% lower than expected or arrives one platform generation late, the industry has more wafers, higher depreciation, and customers who know every supplier needs volume. In that world, Micron still matters strategically but the equity does not deserve to underwrite a 15x FY+5 EPS pass on narrow upside.

4. Cross-examination of management commentary

Management comment 1: HBM is "sold out" for CY2026 volume/pricing. The skeptical reading is that the statement is a near-term allocation marker, not a five-year margin floor. It says customers needed guaranteed supply in CY2026; it does not disclose cancellation terms, fixed price duration, take-or-pay strength, customer concentration, or whether CY2027-CY2031 economics reset toward market pricing. If this statement is overpromising, the first sign will be management shifting from sold-out language to "demand remains healthy" language while CMBU gross margin falls sequentially despite continued AI infrastructure spending.

Management comment 2: HBM TAM is "around $100 billion in 2028." The skeptical reading is that TAM is not Micron revenue and not Micron operating income. A large TAM can still be competed away if HBM becomes more standardized, if competitors qualify comparable HBM4/HBM4E products, or if platform owners dual-source aggressively. The model's HBM line reaches $30.237 billion by 2031 from an assumed $8.8 billion TTM base. That requires Micron to retain strong share, strong pricing, and strong margins after the TAM inflection. If the commentary is wrong, CMBU revenue can still grow but the margin mix will not look like the base case.

Management comment 3: tight DRAM/NAND conditions extend "beyond calendar 2026." This is the statement most likely to make the model overconfident. It supports a 2026-2027 bridge, but the ER2 horizon ends in February 2031. A statement about tightness beyond CY2026 does not prove tightness through 2030, especially while capex rises sharply. If the statement is wrong, CDBU and MCBU will show it quickly: data center SSD revenue can remain strong in bits while NAND ASPs fall, and PC/mobile content gains can be offset by customer price resistance.

5. Stage 5 tie-out reverification

The recency anchor is the central flaw, and the synthesis already flags it correctly. Consolidated TTM revenue is $58.119 billion, but Q2 FY2026 revenue alone was $23.86 billion, which annualizes to $95.4 billion. The base horizon revenue of $114.012 billion looks moderate versus Q2 annualized, but aggressive versus TTM. The model is implicitly saying Q2 is not a peak quarter but an early run-rate indicator. That is exactly the assumption the report needs to underwrite.

The share-count path is not the main problem. It starts from 1,142 million diluted shares, assumes $0.75 billion of annual buybacks at $550, and lets shares drift up to 1,146.2 million because SBC exceeds repurchases. That is conservative

enough. If anything, the red-team issue is free cash flow, not share count. Heavy capex can prevent more buybacks and can raise depreciation, but the synthesis is not relying on aggressive repurchases to clear the P/E gate.

The product where Stage 5 exceeds a competitor-deceleration pattern without enough named structural proof is HBM inside CMBU. The appendix provides structural reasons - AI accelerator memory bandwidth, HBM4 shipments, customer qualification, supply commitments - but it cannot verify a full HBM dollar history or a competitor share trajectory. A 28.0% HBM CAGR from an allocated base is plausible in a tight market and dangerous as a base case. The data are strongest on current scarcity and weakest on five-year share and price durability.

CDBU has a related issue. The base case reaches $23.32 billion of horizon revenue and 35.0% operating margin. That is only modestly above the Q2 FY2026 annualized revenue run-rate, which sounds disciplined, but the product allocation is not disclosed. Data center SSD/NAND momentum is real, yet the model has to allocate $5.0 billion of TTM starting revenue to data center SSD/NAND without a full historical product dollar series. If that surge is narrower or more price-led than assumed, CDBU's base case is too high.

MCBU is the margin trap. The base case assumes only 7.0% revenue CAGR, which is not extreme, but a 38.0% terminal operating margin is a big bet for PCs and smartphones. Management's AI PC "at least 32GB" and flagship smartphone "nearly 80%" content comments are supportive, but consumer device markets are not hyperscale clusters. OEMs can reduce configurations, delay high-memory AI SKUs, or protect bill-of-material cost. A segment that earned 16.7% operating margin in FY2025 and lost money in FY2023 should not be treated as structurally high-30s margin without continuing scarcity.

6. The signal that forces an exit

Exit/downgrade signal: over the next two reported quarters, if CMBU revenue is below $7.0 billion in either quarter and CMBU gross margin or segment margin commentary falls below 55%, while management no longer describes HBM demand/pricing as sold out or equivalently allocation-constrained beyond the next twelve months, the thesis should be downgraded from BUY/WATCH to PASS.

This threshold is specific because Q2 FY2026 CMBU revenue was $7.70 billion with 74% gross margin disclosure, and the base case depends on a durable CMBU ramp to $53.782 billion at 54.0% operating margin. A revenue print below $7.0 billion would show that Q2 was not a stable exit rate. A margin marker below 55% would show the scarcity premium is normalizing faster than the base case assumes. Losing sold-out/allocation language would remove the management bridge that justifies using Q2 as evidence rather than as peak-cycle noise. Any one of those would matter; all three together would break the valuation gate.

Secondary monitor: if FY2027 construction-related capex still rises by more than $10 billion year over year while company gross margin declines below 50% for two consecutive quarters, the report should also move to PASS unless the price has fallen enough to rebuild a material P/E 15 cushion. That would mean Micron is adding capacity into weakening price, the classic memory-cycle error.

7. Conviction at the end of red team

Red-team conclusion: conditional. The thesis survives as a possible WATCH, not as a clean BUY at the current price. The synthesis passes the formal P/E 15 gate, but the pass is thin and the failed recency anchor is not a technicality. It is the core underwriting question: is Q2 FY2026 a durable AI memory run-rate or a shortage peak?

The red team does not say Micron is a bad business. The moat appendix is right that AI does not replace Micron, that CMBU and CDBU are strategically better than old commodity memory, and that customer qualification and scale matter. The red team says the stock price is already asking investors to pay for the better version while leaving only a 10.3% cushion. That is not enough margin of safety for a company whose consolidated operating margin was negative in FY2023, 5.2% in FY2024, 26.1% in FY2025, and 48.3% on the latest TTM.

The synthesis should not be rewritten around "Micron fails." It should be rewritten around "Micron is an AI memory winner whose equity only works if scarcity economics persist long enough to turn boom margins into normalized margins." That is a different thesis from a standard quality compounder. Under Gideon discipline, I would not support BUY from the red-team seat unless the price falls enough to create a much wider cushion or the next two quarters prove that CMBU can hold high revenue and margins after the Q2 spike. Current red-team verdict: WATCH, with a hard downgrade to PASS if the CMBU exit signal trips.

Appendix D - Data Package (raw historicals)

Micron Technology, Inc. - Data Package

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Stage 0 time anchor

- Today: 2026-04-29.
- Company fiscal year convention: Micron uses a 52/53-week fiscal year ending on the Thursday closest to August 31; FY2025 ended August 28, 2025.
- Most recently reported quarter: fiscal Q2 2026, quarter ended February 26, 2026, reported by Micron on March 18, 2026.
- TTM anchor: Q3 FY2025 (ended May 29, 2025) + Q4 FY2025 (ended August 28, 2025) + Q1 FY2026 (ended November 27, 2025) + Q2 FY2026 (ended February 26, 2026) -> TTM ending February 26, 2026.
- Forward horizon: TTM + 5 calendar years = February 26, 2031. Compounding span is exactly five calendar years.

Source provenance - live D pulls

All files below were pulled live in this Sub-Agent D run. No data-warehouse cache was used.

Source	Raw file	Live URL or endpoint
FMP annual income statement	raw/D-FMP-income-statement-annual.json	/stable/income-statement?symbol=MU&period=annual&limit=6
FMP quarterly income statement	raw/D-FMP-income-statement-quarter.json	/stable/income-statement?symbol=MU&period=quarter&limit=8
FMP annual cash flow	raw/D-FMP-cash-flow-statement-annual.json	/stable/cash-flow-statement?symbol=MU&period=annual&limit=6
FMP annual balance sheet	raw/D-FMP-balance-sheet-statement-annual.json	/stable/balance-sheet-statement?symbol=MU&period=annual&limit=6
FMP product segmentation annual/quarter	raw/D-FMP-revenue-product-segmentation-annual.json; raw/D-FMP-revenue-product-segmentation-quarter.json	/stable/revenue-product-segmentation?symbol=MU&period=annual or quarter
FMP transcripts	raw/D-FMP-transcript-FY2026-Q2.json; Q1; FY2025-Q4; FY2025-Q3	/stable/earning-call-transcript?symbol=MU&year={year}&quarter={quarter}
SEC FY2025 10-K	raw/D-SEC-10K-FY2025-mu-20250828.htm	https://www.sec.gov/Archives/edgar/data/723125/000072312525000028/mu-20250828.htm
SEC FY2026 Q2 10-Q	raw/D-SEC-10Q-FQ2-2026-mu-20260226.htm	https://www.sec.gov/Archives/edgar/data/723125/000072312526000006/mu-20260226.htm
SEC FY2026 Q1 10-Q	raw/D-SEC-10Q-FQ1-2026-mu-20251127.htm	https://www.sec.gov/Archives/edgar/data/723125/000072312525000046/mu-20251127.htm
SEC FY2025 Q3 10-Q	raw/D-SEC-10Q-FQ3-2025-mu-20250529.htm	https://www.sec.gov/Archives/edgar/data/723125/000072312525000021/mu-20250529.htm
Micron IR quarterly releases	raw/D-Micron-IR-FQ2-2026-release.html; FQ1-2026; FQ4-2025; FQ3-2025	investors.micron.com release URLs pulled in this run
Micron Investor Day 2022	raw/D-Micron-investor-day-2022-page.html; raw/D-Micron-investor-day-2022-presentation.pdf	https://investors.micron.com/events/event-details/micron-investor-day-2022

Data handling audit

The package uses three distinct data classes and keeps them separate. First, consolidated financial statements are from live FMP /stable/ income statement, cash-flow statement, balance-sheet statement, and key statement endpoints, with SEC or IR controlling only where a specific FMP value conflicts with the filed number. Second, reportable-segment history is from the FY2025 Form 10-K and FY2023 Form 10-K segment footnotes because FMP's product segmentation endpoint is not a reliable segment endpoint after Micron's FY2025 reorganization. Third, management commentary comes from FMP transcripts and Micron IR releases pulled in this run; it is not used to create dollar figures unless management explicitly

disclosed the dollar figure.

Data class	Accepted sources in this package	Not accepted for this package	Practical consequence
Consolidated annual financials	Live FMP /stable/ statements, SEC 10-K tie-outs	Warehouse financial caches; model memory	Five-year revenue, income, cash flow, balance sheet and ROIC are based on fresh pulls.
Current reportable segments	FY2025 10-K restated CMBU/CDBU/MCBU/AEBU table	FMP product endpoint rows labelled DRAM/NAND or legacy BUs	Segment modeling should start from FY2023-FY2025 current taxonomy only.
Legacy reportable segments	FY2023 10-K CNBU/MBU/EBU/SBU table	Any hand-built mapping into current segments	FY2021-FY2022 are preserved for context but are not comparable by segment.
Product / technology dollars	SEC Revenue by Technology table: DRAM, NAND, Other/NOR	HBM or SSD dollar estimates not separately disclosed	HBM and SSD are growth drivers, but not separate historical dollar rows.
Forward commentary	FMP transcripts with date fields and Micron IR releases	Unfetched call summaries, stale transcript cache, press coverage paraphrase	Quotes are short excerpts with raw transcript files retained for downstream verification.

Transcript date checks from the FMP live endpoint:

Requested fiscal period	FMP returned date	Expected call timing	Status
FY2026 Q2	2026-03-18	Same day as Micron FY2026 Q2 IR release	PASS
FY2026 Q1	2025-12-17	Same day as Micron FY2026 Q1 IR release	PASS
FY2025 Q4	2025-09-23	Same day as Micron FY2025 Q4/full-year IR release	PASS
FY2025 Q3	2025-06-25	Same day as Micron FY2025 Q3 IR release	PASS

Segment-to-product guardrails for downstream agents:

Line item	Classification	Modeling guardrail
CMBU	Reportable segment	Includes hyperscale cloud memory and HBM for all data center customers; do not treat it as total DRAM.
CDBU	Reportable segment	Includes data center memory for non-large-hyperscale customers and data center storage; do not treat it as total NAND.
MCBU	Reportable segment	Combines mobile and client; PC and smartphone dollars are not separately disclosed in the segment footnote.
AEBU	Reportable segment	Combines automotive, industrial, and consumer embedded; automotive and industrial together exceeded $2B in Q2 FY2026, but annual submarket dollars are not disclosed.
DRAM	Technology revenue category	Crosses multiple segments, including data center, client, mobile, auto, industrial and graphics.
NAND	Technology revenue category	Crosses CDBU, MCBU and AEBU; data center SSD momentum cannot be equated to all NAND.
HBM	Product family / high-value DRAM	Material to CMBU and data center growth, but no annual dollar series was fetched or disclosed.
Data center SSD	Product family / NAND storage	Material to CDBU and NAND mix, but no full annual dollar series was fetched or disclosed.

1. Reporting structure & taxonomy

Micron is a U.S. domestic filer. The controlling annual taxonomy source is the FY2025 Form 10-K Segment and Other Information note, pulled live from SEC and in FMP structured 10-K JSON. Micron states that it initiated a strategic reorganization into a market-segment-focused business-unit structure and began managing operations under the new structure effective in Q4 FY2025. The 10-K states that all prior-period segment amounts in that filing were retrospectively adjusted to reflect how the CODM assesses segment revenue, cost of goods sold, operating expenses, and operating income. This is a hard taxonomy break: FY2023-FY2025 are available in the new CMBU/CDBU/MCBU/AEBU taxonomy;

FY2021-FY2022 remain available in the legacy CNBU/MBU/EBU/SBU taxonomy from the FY2023 10-K and are not directly comparable by segment.

Current reportable segment	One-line description	FY2025 revenue ($B)	% of FY2025 revenue	FY2025 OI ($B)	Source
CMBU	Cloud Memory Business Unit: memory solutions for large hyperscale cloud customers and HBM for all data center customers.	13.52	36.2%	6.13	FY2025 10-K Segment and Other Information; raw/D-FMP-MU-2025-10k.json
CDBU	Core Data Center Business Unit: memory for mid-tier cloud, enterprise and OEM data center customers plus storage for all data center customers.	7.23	19.3%	2.18	FY2025 10-K Segment and Other Information; raw/D-FMP-MU-2025-10k.json
MCBU	Mobile and Client Business Unit: memory and storage solutions for mobile and client markets.	11.86	31.7%	1.98	FY2025 10-K Segment and Other Information; raw/D-FMP-MU-2025-10k.json
AEBU	Automotive and Embedded Business Unit: memory and storage for automotive, industrial and consumer embedded markets.	4.75	12.7%	0.56	FY2025 10-K Segment and Other Information; raw/D-FMP-MU-2025-10k.json
All Other	Other operations below reportable-segment thresholds.	0.01	0.0%	-0.00	FY2025 10-K Segment and Other Information; raw/D-FMP-MU-2025-10k.json
Unallocated	Corporate/unallocated expenses not used by CODM to assess segment performance.	0.00	n/m	-1.08	FY2025 10-K Segment and Other Information; raw/D-FMP-MU-2025-10k.json

Taxonomy flags: FMP annual revenue-product-segmentation switches FY2025 to DRAM/NAND technology while FY2024-FY2021 use legacy business-unit rows. The FMP quarterly product endpoint also changes taxonomy: older quarters use legacy BUs, while the latest FY2026 Q2 quarter reports DRAM/NAND. Do not mix FMP product endpoint business-unit rows with current reportable segments. For current-segment history use the FY2025 10-K restated table for FY2023-FY2025 and clearly mark FY2021-FY2022 as legacy only.

FY2025 customer headquarters geography	Revenue ($B)	% of total	Source
U.S.	24.11	64.5%	FY2025 10-K Geographic Information; raw/D-FMP-MU-2025-10k.json
Taiwan	5.67	15.2%	FY2025 10-K Geographic Information; raw/D-FMP-MU-2025-10k.json
Mainland China ex-Hong Kong	2.64	7.1%	FY2025 10-K Geographic Information; raw/D-FMP-MU-2025-10k.json
Other Asia Pacific	1.91	5.1%	FY2025 10-K Geographic Information; raw/D-FMP-MU-2025-10k.json
Hong Kong	1.14	3.0%	FY2025 10-K Geographic Information; raw/D-FMP-MU-2025-10k.json
Japan	0.90	2.4%	FY2025 10-K Geographic Information; raw/D-FMP-MU-2025-10k.json
Europe	0.62	1.7%	FY2025 10-K Geographic Information; raw/D-FMP-MU-2025-10k.json
Other	0.38	1.0%	FY2025 10-K Geographic Information; raw/D-FMP-MU-2025-10k.json

2. Consolidated historicals (5 years)

Currency is USD. FMP values are from live /stable/ endpoints. FY2025 operating income uses the SEC 10-K official value of $9.770B because FMP annual income statement reports $9.870B; this $100M discrepancy is flagged in Section 10.

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue ($B)	27.70	30.76	15.54	25.11	37.38	FMP income-statement annual; FY2025 10-K tie

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Operating income ($B)	6.28	9.70	-5.75	1.30	9.77	FMP income-statement annual; FY2025 official 10-K controls
Operating margin (%)	22.7%	31.5%	-37.0%	5.2%	26.1%	calc
Net income ($B)	5.86	8.69	-5.83	0.78	8.54	FMP income-statement annual
EPS diluted ($)	5.14	7.74	-5.34	0.70	7.59	FMP income-statement annual
Diluted share count (M)	1141	1122	1093	1118	1125	FMP income-statement annual
Capex ($B)	10.03	12.07	7.68	8.39	15.86	FMP cash-flow-statement annual
FCF ($B)	2.44	3.11	-6.12	0.12	1.67	FMP cash-flow-statement annual
ROIC (%)	14.6%	19.4%	-10.1%	2.0%	15.7%	calc: NOPAT / avg invested capital

ROIC definition: NOPAT = operating income x (1 - tax rate). Invested capital = total debt + total stockholders equity - cash and short-term investments. Denominator uses average beginning/end invested capital when the prior-year balance sheet is available. Tax rate uses the reported effective tax rate capped at 25% when pretax income is positive; FY2023 uses a normalized 15% because pretax income was negative and the effective rate is not economically meaningful.

Year	NOPAT ($B)	Avg invested capital ($B)	Tax rate used	ROIC
FY2021	5.89	40.31	6.3%	14.6%
FY2022	8.80	45.34	9.3%	19.4%
FY2023	-4.88	48.28	15.0%	-10.1%
FY2024	0.98	49.75	25.0%	2.0%
FY2025	8.63	55.08	11.6%	15.7%

3. Segment historicals

Current taxonomy is comparable for FY2023-FY2025 only. FY2021-FY2022 tables are legacy taxonomy from the FY2023 10-K. Do not build a five-year current-segment CAGR by splicing these tables.

CMBU - current taxonomy

Metric	FY2023	FY2024	FY2025	Source
Revenue ($B)	1.87	3.79	13.52	FY2025 10-K restated Segment and Other Information
YoY %	n/a	102.6%	256.6%	calc
Operating income ($B)	-0.77	0.24	6.13	FY2025 10-K restated Segment and Other Information
Operating margin (%)	-41.0%	6.4%	45.3%	calc

CDBU - current taxonomy

Metric	FY2023	FY2024	FY2025	Source
Revenue ($B)	2.12	4.98	7.23	FY2025 10-K restated Segment and Other Information
YoY %	n/a	134.7%	45.0%	calc
Operating income ($B)	-0.56	0.26	2.18	FY2025 10-K restated Segment and Other Information
Operating margin (%)	-26.5%	5.1%	30.2%	calc

MCBU - current taxonomy

Metric	FY2023	FY2024	FY2025	Source
Revenue ($B)	7.39	11.67	11.86	FY2025 10-K restated Segment and Other Information
YoY %	n/a	57.8%	1.6%	calc
Operating income ($B)	-3.19	-0.00	1.98	FY2025 10-K restated Segment and Other Information
Operating margin (%)	-43.1%	-0.0%	16.7%	calc

AEBU - current taxonomy

Metric	FY2023	FY2024	FY2025	Source
Revenue ($B)	4.14	4.63	4.75	FY2025 10-K restated Segment and Other Information
YoY %	n/a	11.9%	2.6%	calc
Operating income ($B)	0.68	0.43	0.56	FY2025 10-K restated Segment and Other Information
Operating margin (%)	16.4%	9.3%	11.7%	calc

All Other - current taxonomy

Metric	FY2023	FY2024	FY2025	Source
Revenue ($B)	0.01	0.04	0.01	FY2025 10-K restated Segment and Other Information
YoY %	n/a	236.4%	-64.9%	calc
Operating income ($B)	0.01	0.02	-0.00	FY2025 10-K restated Segment and Other Information
Operating margin (%)	72.7%	48.6%	-7.7%	calc

Unallocated - current taxonomy

Metric	FY2023	FY2024	FY2025	Source
Revenue ($B)	0.00	0.00	0.00	FY2025 10-K restated Segment and Other Information
YoY %	n/a	n/m	n/m	calc
Operating income ($B)	-1.91	0.36	-1.08	FY2025 10-K restated Segment and Other Information
Operating margin (%)	n/m	n/m	n/m	calc

Legacy FY2021-FY2022 taxonomy

CNBU legacy metric	FY2021	FY2022	Source
Revenue ($B)	12.28	13.69	FY2023 10-K Segment and Other Information; raw/D-FMP-MU-2023-10k.json
Operating income ($B)	4.29	5.84	FY2023 10-K Segment and Other Information
Operating margin (%)	35.0%	42.7%	calc

MBU legacy metric	FY2021	FY2022	Source
Revenue ($B)	7.20	7.26	FY2023 10-K Segment and Other Information; raw/D-FMP-MU-2023-10k.json
Operating income ($B)	2.17	2.16	FY2023 10-K Segment and Other Information
Operating margin (%)	30.2%	29.8%	calc

EBU legacy metric	FY2021	FY2022	Source
Revenue ($B)	4.21	5.24	FY2023 10-K Segment and Other Information; raw/D-FMP-MU-2023-10k.json
Operating income ($B)	1.01	1.75	FY2023 10-K Segment and Other Information
Operating margin (%)	23.9%	33.5%	calc

SBU legacy metric	FY2021	FY2022	Source
Revenue ($B)	3.97	4.55	FY2023 10-K Segment and Other Information; raw/D-FMP-MU-2023-10k.json
Operating income ($B)	0.17	0.51	FY2023 10-K Segment and Other Information
Operating margin (%)	4.4%	11.3%	calc

All Other legacy metric	FY2021	FY2022	Source
Revenue ($B)	0.04	0.02	FY2023 10-K Segment and Other Information; raw/D-FMP-MU-2023-10k.json
Operating income ($B)	0.02	0.01	FY2023 10-K Segment and Other Information
Operating margin (%)	50.0%	70.6%	calc

Unallocated legacy metric	FY2021	FY2022	Source
Revenue ($B)	0.00	0.00	FY2023 10-K Segment and Other Information; raw/D-FMP-MU-2023-10k.json
Operating income ($B)	-1.38	-0.58	FY2023 10-K Segment and Other Information
Operating margin (%)	n/m	n/m	calc

4. Product / sub-segment historicals

Micron does not disclose HBM, data center SSD, client SSD, mobile DRAM, automotive DRAM, or individual product-family revenue in annual dollar tables. The finest regularly dollar-disclosed product view is revenue by technology: DRAM, NAND, and Other, primarily NOR. HBM, data center SSD, enterprise SSD, high-capacity DIMM, LP server DRAM, PC, smartphone, automotive, industrial and robotics commentary is disclosed as records, growth rates, TAMs, design wins, or qualitative demand comments, not full historical dollar series. No invented product dollars are included.

Technology / product line	What it is	FY2023 revenue ($B)	FY2024 revenue ($B)	FY2025 revenue ($B)	Dollar disclosure source
DRAM	Micron technology revenue category	10.98	17.60	28.58	FY2025 10-K Revenue by Technology; FMP product annual endpoint where comparable
NAND	Micron technology revenue category	4.17	7.21	8.50	FY2025 10-K Revenue by Technology; FMP product annual endpoint where comparable
Other primarily NOR	Micron technology revenue category	0.40	0.29	0.30	FY2025 10-K Revenue by Technology; FMP product annual endpoint where comparable

Segment	Product / KPI	Disclosure method	Last four-quarter growth / status	Source
CMBU / data center	HBM	No full dollar series; records and TAM/growth disclosed	Q3 FY2025 HBM revenue nearly +50% sequential; Q1 FY2026 HBM calendar 2026 volume and pricing agreed; Q2 FY2026 HBM4 volume shipments began	FMP transcripts Q3 FY2025, Q1 FY2026, Q2 FY2026

Segment	Product / KPI	Disclosure method	Last four-quarter growth / status	Source
CDBU / storage	Data center SSD	No full dollar series; records/share disclosed	Q1 FY2026 data center NAND portfolio revenue exceeded $1B; Q2 FY2026 data center NAND revenues more than doubled sequentially	FMP transcripts Q1 FY2026, Q2 FY2026
MCBU	PC/client and mobile memory/storage	No product dollars; unit/content and qualification commentary	Q1 FY2026 PC units expected high-single-digit CY2025; Q2 FY2026 PC/smartphone units may decline low-double-digits in CY2026 due supply constraints	FMP transcripts Q1 FY2026, Q2 FY2026
AEBU	Automotive and industrial	No product dollars by submarket; design-win and combined revenue references	Q2 FY2026 automotive and industrial revenue together exceeded $2B; automotive/industrial demand strengthened	FMP transcript Q2 FY2026

Back-solved product dollars: none. There is no disclosed FY-1 base for HBM or data center SSD suitable for a labeled back-solve, so this package preserves growth commentary only.

5. Most recent quarterly trend

Company FY ends on the Thursday closest to August 31. Most recently completed fiscal quarter at time of writing: FY2026 Q2, covering November 28, 2025 to February 26, 2026, reported on 2026-03-18 via https://investors.micron.com/news-releases/news-release-details/micron-technology-inc-reports-results-second-quarter-fiscal-2026.

Quarter	Consolidated revenue ($B)	GAAP operating margin	DRAM revenue ($B)	NAND revenue ($B)	Other/NOR ($B)	Source
Q3 FY2025	9.30	23.3%	7.07	2.15	0.07	SEC 10-Q/10-K revenue by technology; IR release; DRAM record; NAND up 4% YoY disclosed in Q3 call.
Q4 FY2025	11.32	32.3%	8.98	2.25	0.08	SEC 10-Q/10-K revenue by technology; IR release; DRAM up 69% YoY; NAND down 5% YoY per Q4 call.
Q1 FY2026	13.64	45.0%	10.81	2.74	0.09	SEC 10-Q/10-K revenue by technology; IR release; DRAM up 69% YoY; NAND up 22% YoY per Q1 call.
Q2 FY2026	23.86	67.6%	18.77	5.00	0.10	SEC 10-Q/10-K revenue by technology; IR release; DRAM up 207% YoY; NAND up 169% YoY per Q2 call.

Quarter	CMBU revenue ($B)	CDBU revenue ($B)	MCBU revenue ($B)	AEBU revenue ($B)	Segment margin / disclosure	Source and flags
Q3 FY2025	3.43	1.51	3.22	1.16	n/d	derived current taxonomy; Derived: FY2025 annual current taxonomy less FY2025 H1 current taxonomy less rounded Q4 disclosures; not separately released as a standalone current-taxonomy quarter.
Q4 FY2025	4.50	1.60	3.80	1.40	CMBU 59%, CDBU 41%, MCBU 36%, AEBU 31%	2025-09-23 transcript/release; Rounded revenue and gross margins disclosed on Q4 call.
Q1 FY2026	5.30	2.40	4.30	1.70	CMBU 66%, CDBU 51%, MCBU 54%, AEBU 45%	2025-12-17 transcript/release; Rounded revenue and gross margins disclosed on Q1 call.

Quarter	CMBU revenue ($B)	CDBU revenue ($B)	MCBU revenue ($B)	AEBU revenue ($B)	Segment margin / disclosure	Source and flags
Q2 FY2026	7.70	5.70	7.70	2.70	CMBU 74%, CDBU 74%, MCBU 79%, AEBU 68%	2026-03-18 transcript/release; Rounded revenue and gross margins disclosed on Q2 call.

6. Management commentary on forward growth

Copyright note for downstream users: this section uses short verbatim excerpts only and paraphrases the surrounding management context. Full transcript context is preserved in raw/D-FMP-transcript-*.json. Dates below are the transcript date fields returned by FMP and verified to match expected call dates.

Segment / topic	Source	Speaker	Short verbatim excerpt	Interpretation
CMBU / HBM / cloud memory	Q2 FY2026 call, date 2026-03-18	Sanjay Mehrotra, Chairman/CEO	"strategic asset"	Management framed memory as strategic to AI, supporting sustained data-center pricing and supply commitments.
CMBU / HBM	Q1 FY2026 call, date 2025-12-17	Sanjay Mehrotra	"sold out"	Micron said calendar 2026 HBM volume and pricing were completed with customers; model HBM as allocation-constrained rather than demand-constrained near term.
CMBU / HBM	Q1 FY2026 call, date 2025-12-17	Sanjay Mehrotra	"around $100 billion in 2028"	Management raised HBM TAM timing, saying the $100B milestone arrives earlier than prior outlook.
CMBU / server DRAM	Q2 FY2026 call, date 2026-03-18	Sanjay Mehrotra	"low-teens percentage range"	Server units are expected to grow in CY2026, with content gains compounding unit growth.
CDBU / data center SSD	Q2 FY2026 call, date 2026-03-18	Sanjay Mehrotra	"more than doubled sequentially"	Data center NAND revenue was described as sharply above prior quarter and expected to grow further.
CDBU / data center SSD	Q1 FY2026 call, date 2025-12-17	Sanjay Mehrotra	"exceeded $1 billion"	Data center NAND portfolio revenue crossed a quarterly scale marker, but no full historical product dollars were disclosed.
MCBU / PCs	Q1 FY2026 call, date 2025-12-17	Sanjay Mehrotra	"high single-digit percentage range"	Management lifted CY2025 PC unit expectations and tied PC demand to Windows 10 end-of-life and AI PCs.
MCBU / edge AI devices	Q2 FY2026 call, date 2026-03-18	Sanjay Mehrotra	"at least 32GB"	Agentic AI PCs are expected to require higher DRAM content, offsetting possible unit pressure.
MCBU / smartphones	Q2 FY2026 call, date 2026-03-18	Sanjay Mehrotra	"nearly 80%"	Flagship smartphone mix with 12GB+ DRAM rose sharply; content growth is the more important driver than units.
AEBU / automotive	Q2 FY2026 call, date 2026-03-18	Sanjay Mehrotra	"over 300GB"	Advanced autonomy creates a long-duration automotive memory content ramp from low current DRAM content.
AEBU / industrial	Q1 FY2026 call, date 2025-12-17	Sanjay Mehrotra	"Long-term demand trends"	Industrial demand was tied to factory automation, aerospace/defense, robotics, edge networking and surveillance.
AEBU / robotics	Q2 FY2026 call, date 2026-03-18	Sanjay Mehrotra	"20-year growth vector"	Robotics was identified as a long-term growth vector requiring automotive-like compute, memory and storage.

Segment / topic	Source	Speaker	Short verbatim excerpt	Interpretation
Corporate supply	Q1 FY2026 call, date 2025-12-17	Sanjay Mehrotra	"beyond calendar 2026"	Management expects tight DRAM/NAND conditions beyond CY2026, supporting elevated margins and multiyear contracts.
Corporate capital intensity	Q2 FY2026 call, date 2026-03-18	Sanjay Mehrotra	"above $25 billion"	FY2026 capex outlook moved above $25B; FY2027 construction capex is expected to step up meaningfully.
Corporate capital allocation	Q2 FY2026 call, date 2026-03-18	Mark Murphy, CFO	"dividend increase of 30%"	Balance-sheet strengthening, debt reduction, dividend growth and selective buybacks are the stated priorities.
Investor Day / industry discipline	Investor Day 2022, date 2022-05-12	Micron presentation	"supply in-line with demand"	Investor Day framed ROIC and industry supply discipline as structural; later AI/HBM demand has increased required capex.

7. Capital allocation history (5 years)

Year	Capex ($B)	Capex / revenue	R&D ($B)	R&D / revenue	Buybacks ($B)	Dividends ($B)	M&A ($B)	Source
FY2021	10.03	36.2%	2.66	9.6%	1.20	0.00	0.00	FMP cash-flow/income annual; M&A set to disclosed material acquisitions, none identified in annual filings
FY2022	12.07	39.2%	3.12	10.1%	2.43	0.46	0.00	FMP cash-flow/income annual; M&A set to disclosed material acquisitions, none identified in annual filings
FY2023	7.68	49.4%	3.11	20.0%	0.42	0.50	0.00	FMP cash-flow/income annual; M&A set to disclosed material acquisitions, none identified in annual filings
FY2024	8.39	33.4%	3.43	13.7%	0.30	0.51	0.00	FMP cash-flow/income annual; M&A set to disclosed material acquisitions, none identified in annual filings
FY2025	15.86	42.4%	3.80	10.2%	0.00	0.52	0.00	FMP cash-flow/income annual; M&A set to disclosed material acquisitions, none identified in annual filings

Note: FMP cash-flow annual shows nonzero acquisitionsNet in some years that appears inconsistent with Micron filing narrative and mirrors classification artifacts; it is not used as M&A without primary-source support.

8. Balance sheet snapshot (FY2025)

Item	Value	Source
Cash & equivalents	$9.64B	FMP annual balance sheet; FY2025 10-K
Short-term investments	$0.67B	FMP annual balance sheet

Item	Value	Source
Total debt (current + LT)	$15.28B	FMP annual balance sheet
Net debt (cash)	$5.64B	FMP annual balance sheet
Net debt / EBITDA	0.30x	calc using FMP FY2025 EBITDA
Goodwill + intangibles	$1.60B	FMP annual balance sheet
Tangible book value	$52.56B	calc: equity less goodwill and intangibles

9. Recent corporate actions (last 12 months)

- 2025-09-23: Micron reported FY2025 Q4 and full-year results and introduced the new market-segment reporting structure in the FY2025 10-K; prior FY2023-FY2025 segment amounts in that 10-K were retrospectively adjusted.
- 2025-12-17: Board declared a $0.115 quarterly dividend payable January 14, 2026; Q1 release also disclosed $300M of share repurchases permitted by CHIPS agreement terms and $2.7B of debt reduction.
- 2026-03-18: Board approved a 30% quarterly dividend increase; Q2 release/call disclosed $350M of share repurchases and $1.6B debt reduction during the quarter.
- 2026-03-18: Micron said it successfully closed the acquisition of the Tongluo site from Powerchip Semiconductor ahead of schedule and expects meaningful product shipments from the existing fab beginning in FY2028.
- 2026-03-18: Management said it began volume shipment of HBM4 36GB 12-Hi in 2026 for NVIDIA Vera Rubin and sampled HBM4 16-Hi; this is product-roadmap commentary, not a separate revenue line.
- 2026-03-18: Management raised FY2026 capex expectation above $25B and said FY2027 construction-related capex is expected to increase by over $10B year over year.
- No CEO/CFO transition, major divestiture, large legal settlement, or regulatory action was identified in live FY2025 10-K, FY2026 Q1/Q2 releases, or Q2 transcript pulls.

10. Open data gaps and flags

- Current segment history is comparable only from FY2023 through FY2025 in the FY2025 10-K. FY2021-FY2022 are legacy taxonomy and should not be spliced into current-segment growth rates.
- Q3 FY2025 standalone current-taxonomy segment revenue was not separately released before the Q4 reorganization. The Section 5 current-taxonomy Q3 row is derived from FY2025 annual current taxonomy less FY2025 H1 current taxonomy less rounded Q4 disclosures; use only as an approximate bridge.
- HBM, data center SSD, enterprise SSD, client SSD, automotive, industrial, PC, and smartphone product revenues are not separately disclosed as full historical dollar series. This package does not back-solve them.
- FMP annual product endpoint for FY2025 reports DRAM and NAND only and omits Other/NOR. SEC Revenue by Technology controls the full tie-out.
- FMP FY2025 annual income statement reports operating income of $9.870B while the SEC FY2025 10-K and Micron IR release report $9.770B. Official SEC/IR value controls in this package.
- FMP financial-reports-form-10-q-json returned HTTP 404 for FY2026 Q2, FY2026 Q1, and FY2025 Q3 on original and identical retry calls. SEC 10-Q HTML, IR releases, FMP statements, and FMP transcripts were available and used.
- Legacy investorday.micron.com URLs failed DNS resolution on original and identical retry calls. Current Micron IR investor-day event page and PDF were fetched successfully from investors.micron.com.
- Capital allocation table sets M&A to $0.00B for material acquisitions identified in annual filings. FMP cash-flow acquisitionsNet showed apparent classification artifacts and was not used without filing support.